



NASA SP-7039(20)
Section 2
Indexes

NASA PATENT ABSTRACTS BIBLIOGRAPHY



A CONTINUING BIBLIOGRAPHY

Section 2 • Indexes

JANUARY 1982

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ABSTRACTS BIBLIOGRAPHY, A CONTINUING
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NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

ACCESSION NUMBER RANGES

<i>Bibliography Number</i>	<i>STAR Accession Numbers</i>
NASA SP-7039(04)	N69-20701-N73-33931
NASA SP-7039(12)	N74-10001-N77-34042
NASA SP-7039(13)	N78-10001-N78-22018
NASA SP-7039(14)	N78-22019-N78-34034
NASA SP-7039(15)	N79-10001-N79-21993
NASA SP-7039(16)	N79-21994-N79-34158
NASA SP-7039(17)	N80-10001-N80-22254
NASA SP-7039(18)	N80-22255-N80-34339
NASA SP-7039(19)	N81-10001-N81-21997
NASA SP-7039(20)	N81-21998-N81-34139

NASA SP-7039(20)

Section 2

Indexes

NASA

**PATENT
ABSTRACTS
BIBLIOGRAPHY**

A CONTINUING BIBLIOGRAPHY

Section 2 • Abstracts

Indexes for the annotated references to NASA-owned inventions covered by U.S. patents and applications for patent that were announced in *Scientific and Technical Aerospace Reports (STAR)* between May 1969 and December 1981. This issue supersedes all previous Index Sections.



Scientific and Technical Information Branch

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

JANUARY 1982

Washington, D.C.

This supplement is available as NTISUB/111/093 from the National Technical Information Service (NTIS), Springfield, Virginia 22161 at the price of \$12.50 domestic; \$25.50 foreign for standing orders. Please note: Standing orders are subscriptions which do not terminate at the end of a year, as do regular subscriptions, but continue indefinitely unless specifically terminated by the subscriber.

INTRODUCTION

Several thousand inventions result each year from the aeronautical and space research supported by the National Aeronautics and Space Administration. The inventions having important use in government programs or significant commercial potential are usually patented by NASA. These inventions cover practically all fields of technology and include many that have useful and valuable commercial application.

NASA inventions best serve the interests of the United States when their benefits are available to the public. In many instances, the granting of nonexclusive or exclusive licenses for the practice of these inventions may assist in the accomplishment of this objective. This bibliography is published as a service to companies, firms, and individuals seeking new licensable products for the commercial market.

The *NASA Patent Abstracts Bibliography (NASA PAB)* is a semiannual NASA publication containing comprehensive abstracts and indexes of NASA-owned inventions covered by U.S. patents and applications for patent. The citations included in *NASA PAB* were originally published in NASA's *Scientific and Technical Aerospace Reports (STAR)* and cover *STAR* announcements made since May 1969.

For the convenience of the user, each issue of *NASA PAB* has a separately bound Abstract Section (Section 1) and Index Section (Section 2). Although each Abstract Section covers only the indicated six-month period, the Index Section is cumulative covering all NASA-owned inventions announced in *STAR* since May 1969. Thus a complete set of *NASA PAB* would consist of the Abstract Sections of Issue 04 (January 1974) and Issue 12 (January 1978) and the Abstract Section for all subsequent issues and the Index Section for the most recent issue.

The 165 citations published in this issue of the Abstract Section cover the period July 1981 through December 1981. The Index Section references approximately 4000 citations covering the period May 1969 through December 1981.

ABSTRACT SECTION (SECTION 1)

This *PAB* issue incorporates the 1975 *STAR* category revisions which include 10 major subdivisions divided into 74 specific categories and one general category/division. (See Table of Contents for the scope note of each category under which are grouped appropriate NASA inventions.) This new scheme was devised in lieu of the 34 category divisions which were utilized in *PAB* supplements (01) through (06) covering *STAR* abstracts from May 1969 through January 1974. Each entry in the Abstract Section consists of a *STAR* citation accompanied by an abstract and a key illustration taken from the patent or application for patent drawing. Entries are arranged in subject category in order of the ascending NASA Accession Number originally assigned in *STAR* to the invention. The range of NASA Accession Numbers within each issue is printed on the inside front cover.

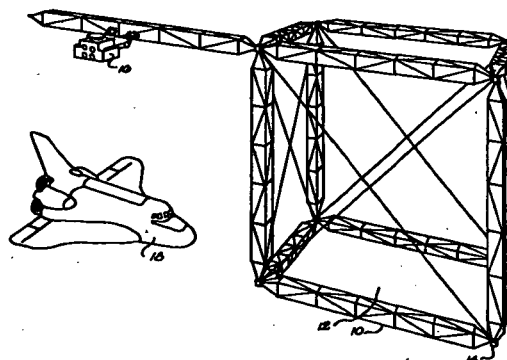
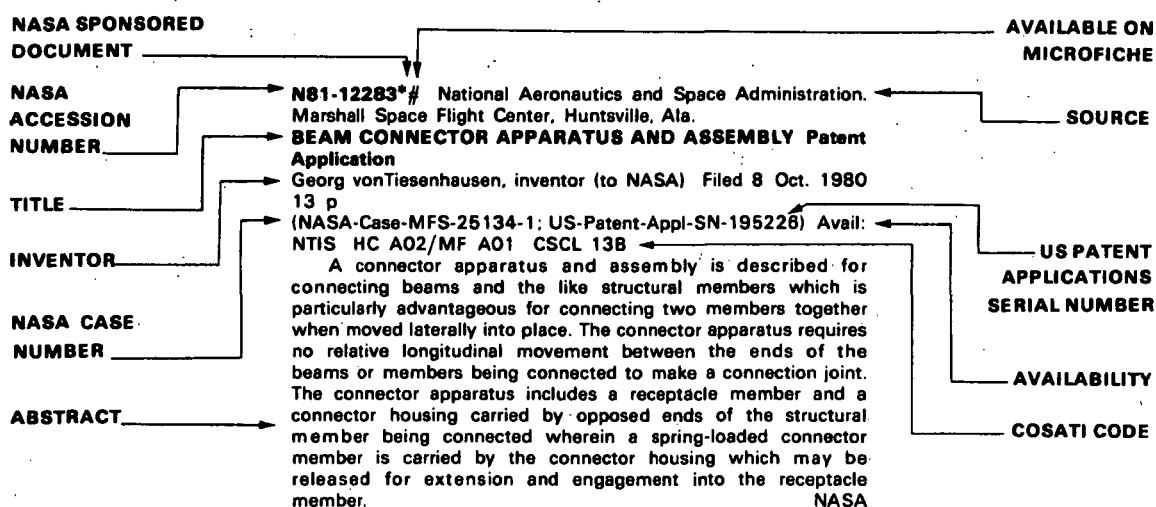
Abstract Citation Data Elements: Each of the abstract citations has several data elements useful for identification and indexing purposes, as follows:

NASA Accession Number
NASA Case Number
Inventor's Name

Title of Invention
 U.S. Patent Application Serial Number
 U.S. Patent Number (for issued patents only)
 U.S. Patent Office Classification Number(s)
 (for issued patents only)

These data elements in the citation of the abstract as depicted in the Typical Citation and Abstract reproduced below and are also used in the several indexes.

TYPICAL CITATION AND ABSTRACT



KEY ILLUSTRATION

INDEX SECTION (SECTION 2)

The Index Section is divided into five indexes which are cross-indexed and are useful in locating a single invention or groups of inventions.

Each of the five indexes utilizes basic data elements: (1) Subject Category Number, (2) NASA Accession Number, and (3) NASA Case Number, in addition to other specific index terms.

Subject Index: Lists all inventions according to appropriate alphabetized technical term and indicates the related NASA Case Number, the Subject Category Number, and the NASA Accession Number.

Inventor Index: Lists all inventions according to alphabetized names of inventors and indicates the related NASA Case Number, the Subject Category Number, and the NASA Accession Number.

Source Index: Lists all inventions according to alphabetized source of invention (i.e., name of contractor or government installation where invention was made) and indicates the related NASA Case Number, the Subject Category Number, and the NASA Accession Number.

Number Index: Lists inventions in order of ascending (1) NASA Case Number, (2) U.S. Patent Application Serial Number, (3) U.S. Patent Classification Number, and (4) U.S. Patent Number and indicates the related Subject Category Number and the NASA Accession Number.

Accession Number Index: Lists all inventions in order of ascending NASA Accession Number and indicates the related Subject Category Number, the NASA Case Number, the U.S. Patent Application Serial Number, the U.S. Patent Classification Number, and the U.S. Patent Number.

HOW TO USE THIS PUBLICATION TO IDENTIFY NASA INVENTIONS

To identify one or more NASA inventions within a specific technical field or subject, several techniques are possible when using the flexibility incorporated into the *NASA PAB*.

(1) *Using Subject Category:* To identify all NASA inventions in any one of the subject categories in this issue of *NASA PAB*, select the desired Subject Category in the Abstract Section (Section 1) and find the inventions abstracted thereunder.

(2) *Using Subject Index:* To identify all NASA inventions listed under a desired technical subject index term, (A) turn to the cumulative Subject Index in the Index Section and find the invention(s) listed under the desired technical subject term. (B) Note the indicated Accession Number and the Subject Category Number. (C) Using the indicated Accession Number, turn to the inside front cover of the Index Section to determine which issue of the Abstract Section includes the Accession Number desired. (D) To find the abstract of the particular invention in the issue of the Abstract Section selected, (i) use the Subject Category Number to locate the Subject Category and (ii) use the Accession Number to locate the desired invention within the Subject Category listing.

(3) *Using Patent Classification Index:* To identify all inventions covered by issued NASA patents (does not include applications for patent) within a desired Patent Classification, (A) turn to the Patent Classification Number in the Number Index of Section 2 and find the associated inventions(s), and (B) follow the instructions outlined in (2)(B), and (D) above.

PUBLIC AVAILABILITY OF COPIES OF PATENTS AND PATENT APPLICATIONS

Copies of U.S. patents may be purchased directly from the U.S. Patent and Trademark Office, Washington, D.C. 20231, for fifty cents a copy. When ordering patents, the U.S. Patent Number should be used, and payment must be remitted in advance, preferably by money order or check payable to the Commissioner of Patents and Trademarks. Prepaid purchase coupons for ordering are also available from the Patent and Trademark Office.

NASA *patent application specifications* are sold in paper copy by the National Technical Information Service at price code A02 (\$6.00 domestic; \$12.00 foreign). Microfiche are sold at price code A01 (\$4.00 domestic; \$8.00 foreign). The US-Patent-Appl-SN-number should be used in ordering either paper copy or microfiche from NTIS.

LICENSES FOR COMMERCIAL USE: INQUIRIES AND APPLICATIONS FOR LICENSE

NASA inventions, abstracted in *NASA PAB*, are available for nonexclusive or exclusive licensing in accordance with the NASA Patent Licensing Regulations. It is significant that all licenses for NASA inventions shall be by express written instruments and that no license will be granted or implied in a NASA invention except as provided in the NASA Patent Licensing Regulations.

Inquiries concerning the NASA Patent Licensing Program or the availability of licenses for the commercial use of NASA-owned inventions covered by U.S. patents or pending applications for patent should be forwarded to the NASA Patent Counsel of the NASA installation having cognizance of the specific invention, or the Assistant General Counsel for Patent Matters, Code GP-4, National Aeronautics and Space Administration, Washington, D.C. 20546. Inquiries should refer to the NASA Case Number, the Title of the Invention, and the U.S. Patent Number or the U.S. Application Serial Number assigned to the invention as shown in *NASA PAB*.

The NASA Patent Counsel having cognizance of the invention is determined by the first three letters or prefix of the NASA Case Number assigned to the invention. The addresses of NASA Patent Counsels are listed alongside the NASA Case Number prefix letters in the following table. Formal application of license must be submitted on the NASA Form, Application for NASA Patent License, which is available upon request from any NASA Patent Counsel.

**NASA Case
Number
Prefix Letters**

**Address of Cognizant
NASA Patent Counsel**

ARC-xxxxx
XAR-xxxxx

Ames Research Center
Mail Code: 200-11A
Moffett Field, California 94035
Telephone: (415)965-5104

ERC-xxxxx
XER-xxxxx
HQN-xxxxx
XHQ-xxxxx

NASA Headquarters
Mail Code: GP-4
Washington, D.C. 20546
Telephone: (202)755-3954

GSC-xxxxx
XGS-xxxxx

Goddard Space Flight Center
Mail Code: 204
Greenbelt, Maryland 20771
Telephone: (301)344-7351

KSC-xxxxx
XKS-xxxxx

John F. Kennedy Space Center
Mail Code: PT-PAT
Kennedy Space Center, Florida 32899
Telephone: (305)867-2544

LAR-xxxxx
XLA-xxxxx

Langley Research Center
Mail Code: 279
Hampton, Virginia 23365
Telephone: (804)827-8725

LEW-xxxxx
XLE-xxxxx

Lewis Research Center
Mail Code: 500-318
21000 Brookpark Road
Cleveland, Ohio 44135
Telephone: (216)433-6346

MSC-xxxxx
XMS-xxxxx

Lyndon B. Johnson Space Center
Mail Code: AL3
Houston, Texas 77058
Telephone: (713)483-4871

MFS-xxxxx
XMF-xxxxx

George C. Marshall Space Flight
Center
Mail Code: CC01
Huntsville, Alabama 35812
Telephone: (205)453-0020

NPO-xxxxx
XNP-xxxxx
FRC-xxxxx
XFR-xxxxx
WOO-xxxxx

NASA Resident Legal Office
Mail Code: 180-801
4800 Oak Grove Drive
Pasadena, California 91103
Telephone: (213)354-2700

PATENT LICENSING REGULATIONS

NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

14 CFR Part 1245

Licensing of NASA Inventions

AGENCY: National Aeronautics and Space Administration.

ACTION: Interim regulation with comments requested.

SUMMARY: The National Aeronautics and Space Administration (NASA) is revising its patent licensing regulations to conform with Pub. L. 96-517. This interim regulation provides policies and procedures applicable to the licensing of federally owned inventions in the custody of the National Aeronautics and Space Administration, and implements Pub. L. 96-517. The object of this subpart is to use the patent system to promote the utilization of inventions arising from NASA supported research and development.

EFFECTIVE DATE: July 1, 1981. Comments must be received in writing by December 2, 1981. Unless a notice is published in the *Federal Register* after the comment period indicating changes to be made, this interim regulation shall become a final regulation.

ADDRESS: Mr. John G. Mannix, Director of Patent Licensing, GP-4, NASA, Washington, D.C. 20546.

FOR FURTHER INFORMATION CONTACT: Mr. John G. Mannix, (202) 755-3954.

SUPPLEMENTARY INFORMATION:

PART 1245—PATENTS AND OTHER INTELLECTUAL PROPERTY RIGHTS

Subpart 2 of Part 1245 is revised to read as follows:

Subpart 2—Licensing of NASA Inventions

Sec.

1245.200 Scope of subpart.

1245.201 Policy and objective.

1245.202 Definitions.

1245.203 Authority to grant licenses.

Restrictions and Conditions

1245.204 All licenses granted under this subpart.

Types of Licenses

1245.205 Nonexclusive licenses.

1245.206 Exclusive and partially exclusive licenses.

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1245.207 Application for a license.

1245.208 Processing applications.

1245.209 Notice to Attorney General.

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1245.214 Confidentiality of information.

Authority: 35 U.S.C. Section 207 and 208, 94 Stat. 3023 and 3024.

Subpart 2—Licensing of NASA Inventions

§ 1245.200 Scope of subpart.

This subpart prescribes the terms, conditions, and procedures upon which a NASA invention may be licensed. It does not affect licenses which (a) were in effect prior to July 1, 1981; (b) may exist at the time of the Government's acquisition of title to the invention, including those resulting from the allocation of rights to inventions made under Government research and development contracts; (c) are the result of an authorized exchange of rights in the settlement of patent disputes; or (d) are otherwise authorized by law or treaty.

§ 1245.201 Policy and objective.

It is the policy and objective of this subpart to use the patent system to promote the utilization of inventions arising from NASA supported research and development.

§ 1245.202 Definitions.

(a) "Federally owned invention" means an invention, plant, or design which is covered by a patent, or patent application in the United States, or a patent, patent application, plant variety protection, or other form of protection, in a foreign country, title to which has been assigned to or otherwise vested in the United States Government.

(b) "Federal agency" means an executive department, military department, Government corporation, or independent establishment, except the Tennessee Valley Authority, which has custody of a Federally owned invention.

(c) "NASA Invention" means a Federally owned invention with respect to which NASA maintains custody and administration, in whole or in part, of the right, title, or interest in such invention on behalf of the United States Government.

(d) "Small business firm" means a small business concern as defined at section 2 of Pub. L. 85-536 (15 U.S.C. 632) and implementing regulations of the Administrator of the Small Business Administration. For the purpose of these regulations, the size standard for small business concerns involved in Government procurement, contained in 13 CFR 121.3-8, and in subcontracting, contained in 13 CFR 121.3-12, will be used.

(e) "Practical application" means to manufacture in the case of a composition or product, to practice in the case of a process or method, or to

operate in the case of a machine or system; and, in each case, under such conditions as to establish that the invention is being utilized and that its benefits are to the extent permitted by law or Government regulations available to the public on reasonable terms.

(f) "United States" means the United States of America, its territories and possessions, the District of Columbia, and the Commonwealth of Puerto Rico.

§ 1245.203 Authority to grant licenses.

NASA inventions shall be made available for licensing as deemed appropriate in the public interest. NASA may grant nonexclusive, partially exclusive, or exclusive licenses thereto under this subpart on inventions in its custody.

Restrictions and Conditions

§ 1245.204 All licenses granted under this subpart.

(a) *Restrictions.* (1) A license may be granted only if the applicant has supplied NASA with a satisfactory plan for development or marketing of the invention, or both, and with information about the applicant's capability to fulfill the plan.

(2) A license granting rights to use or sell under a NASA invention in the United States shall normally be granted only to a licensee who agrees that any products embodying the invention or produced through the use of the invention will be manufactured substantially in the United States.

(b) *Conditions.* Licenses shall contain such terms and conditions as NASA determines are appropriate for the protection of the interests of the Federal Government and the public and are not in conflict with law or this subpart. The following terms and conditions apply to any license:

(1) The duration of the license shall be for a period specified in the license agreement, unless sooner terminated in accordance with this subpart.

(2) The license may be granted for all or less than all fields of use of the invention or in specified geographical areas, or both.

(3) The license may extend to subsidiaries of the licensee or other parties if provided for in the license but shall be nonassignable without approval of NASA, except to the successor of that part of the licensee's business to which the invention pertains.

(4) The license may provide the licensee the right to grant sublicenses under the license, subject to the approval of NASA. Each sublicense shall make reference to the license, including the rights retained by the Government, and a copy of such

sublicense shall be furnished to NASA.

(5) The license shall require the licensee to carry out the plan for development or marketing of the invention, or both, to bring the invention to practical application within a period specified in the license, and to continue to make the benefits of the invention reasonably accessible to the public.

(6) The license shall require the licensee to report periodically on the utilization or efforts at obtaining utilization that are being made by the licensee, with particular reference to the plan submitted.

(7) All licenses shall normally require royalties or other consideration.

(8) Where an agreement is obtained pursuant to § 1245.204(a)(2) that any products embodying the invention or produced through use of the invention will be manufactured substantially in the United States, the license shall recite such agreement.

(9) The license shall provide for the right of NASA to terminate the license, in whole or in part, if:

(i) NASA determines that the licensee is not executing the plan submitted with its request for a license and the licensee cannot otherwise demonstrate to the satisfaction of NASA that it has taken or can be expected to take within a reasonable time effective steps to achieve practical application of the invention;

(ii) NASA determines that such action is necessary to meet requirements for public use specified by Federal regulations issued after the date of the license and such requirements are not reasonably satisfied by the licensee;

(iii) The licensee has willfully made a false statement of or willfully omitted a material fact in the license application or in any report required by the license agreement; or

(iv) The licensee commits a substantial breach of a covenant or agreement contained in the license.

(10) The license may be modified or terminated, consistent with this subpart, upon mutual agreement of NASA and the licensee.

(11) Nothing relating to the grant of a license, nor the grant itself, shall be construed to confer upon any person any immunity from or defenses under the antitrust laws or from a charge of patent misuse, and the acquisition and use of rights pursuant to this subpart shall not be immunized from the operation of state or Federal law by reason of the source of the grant.

Types of Licenses

§ 1245.205 Nonexclusive licenses.

(a) *Availability of licenses.* Nonexclusive licenses may be granted under NASA inventions without publication of availability or notice of a prospective license.

(b) *Conditions.* In addition to the provisions of § 1245.204, the nonexclusive license may also provide that, after termination of a period specified in the license agreement, NASA may restrict the license to the fields of use or geographic areas, or both, in which the licensee has brought the invention to practical application and continues to make the benefits of the invention reasonably accessible to the public. However, such restriction shall be made only in order to grant an exclusive or partially exclusive license in accordance with this subpart.

§ 1245.206 Exclusive and partially exclusive licenses.

(a) *Domestic licenses.*

(1) *Availability of licenses.* Exclusive or partially exclusive licenses may be granted on NASA inventions: (i) 3 months after notice of the invention's availability has been announced in the Federal Register; or (ii) without such notice where NASA determines that expeditious granting of such a license will best serve the interests of the Federal Government and the public; and (iii) in either situation, specified in (a)(1)(i) or (ii) of this section only if:

(A) Notice of a prospective license, identifying the invention and the prospective licensee, has been published in the Federal Register, providing opportunity for filing written objections within a 60-day period;

(B) After expiration of the period in § 1245.206(a) (1)(iii)(A) and consideration of any written objections received during the period, NASA has determined that:

(1) The interests of the Federal Government and the public will best be served by the proposed license, in view of the applicant's intentions, plans, and ability to bring the invention to practical application or otherwise promote the invention's utilization by the public;

(2) The desired practical application has not been achieved, or is not likely expeditiously to be achieved, under any nonexclusive license which has been granted, or which may be granted, on the invention;

(3) Exclusive or partially exclusive licensing is a reasonable and necessary incentive to call forth the investment of risk capital and expenditures to bring the invention to practical application or

otherwise promote the invention's utilization by the public; and

(4) The proposed terms and scope of exclusivity are not greater than reasonably necessary to provide the incentive for bringing the invention to practical application or otherwise promote the invention's utilization by the public;

(C) NASA has not determined that the grant of such license will tend substantially to lessen competition or result in undue concentration in any section of the country in any line of commerce to which the technology to be licensed relates, or to create or maintain other situations inconsistent with the antitrust laws; and

(D) NASA has given first preference to any small business firms submitting plans that are determined by the agency to be within the capabilities of the firms and as equally likely, if executed, to bring the invention to practical application as any plans submitted by applicants that are not small business firms.

(2) *Conditions.* In addition to the provisions of § 1245.204, the following terms and conditions apply to domestic exclusive and partially exclusive licenses:

(i) The license shall be subject to the irrevocable, royalty-free right of the Government of the United States to practice and have practiced the invention on behalf of the United States and on behalf of any foreign government or international organization pursuant to any existing or future treaty or agreement with the United States.

(ii) The license shall reserve to NASA the right to require the licensee to grant sublicenses to responsible applicants, on reasonable terms, when necessary to fulfill health or safety needs.

(iii) The license shall be subject to any licenses in force at the time of the grant of the exclusive or partially exclusive license.

(iv) The license may grant the licensee the right of enforcement of the licensed patent pursuant to the provisions of Chapter 29 of Title 35, United States Code, or other statutes, as determined appropriate in the public interest.

(b) *Foreign licenses.*

(1) *Availability of licenses.* Exclusive or partially exclusive licenses may be granted on a NASA invention covered by a foreign patent, patent application, or other form of protection, provided that:

(i) Notice of a prospective license, identifying the invention and prospective licensee, has been published in the Federal Register, providing opportunity for filing written objections

PATENT LICENSING REGULATIONS

within a 60-day period and following consideration of such objections;

(ii) NASA has considered whether the interests of the Federal Government or United States industry in foreign commerce will be enhanced; and

(iii) NASA has not determined that the grant of such license will tend substantially to lessen competition or result in undue concentration in any section of the United States in any line of commerce to which the technology to be licensed relates, or to create or maintain other situations inconsistent with antitrust laws.

(2) *Conditions.* In addition to the provisions of § 1245.204, the following terms and conditions apply to foreign exclusive and partially exclusive licenses:

(i) The license shall be subject to the irrevocable, royalty-free right of the Government of the United States to practice and have practiced the invention on behalf of the United States and on behalf of any foreign government or international organization pursuant to any existing or future treaty or agreement with the United States.

(ii) The license shall be subject to any licenses in force at the time of the grant of the exclusive or partially exclusive license.

(iii) The license may grant the licensee the right to take any suitable and necessary actions to protect the licensed property, on behalf of the Federal Government.

(c) *Record of determinations.* NASA shall maintain a record of determinations to grant exclusive or partially exclusive licenses.

Procedures

§ 1245.207 Application for a license.

An application for a license should be addressed to the Patent Counsel at the NASA installation having responsibility for the invention and shall normally include:

(a) Identification of the invention for which the license is desired, including the patent application serial number or patent number, title, and date, if known;

(b) Identification of the type of license for which the application is submitted;

(c) Name and address of the person, company, or organization applying for the license and the citizenship or place of incorporation of the applicant;

(d) Name, address, and telephone number of representative of applicant to whom correspondence should be sent;

(e) Nature and type of applicant's business, identifying products or services which the applicant has successfully commercialized, and

approximate number of applicant's employees;

(f) Source of information concerning the availability of a license on the invention;

(g) A statement indicating whether applicant is a small business firm as defined in § 1245.202(c);

(h) A detailed description of applicant's plan for development or marketing of the invention, or both, which should include:

(1) A statement of the time, nature and amount of anticipated investment of capital and other resources which applicant believes will be required to bring the invention to practical application;

(2) A statement as to applicant's capability and intention to fulfill the plan, including information regarding manufacturing, marketing, financial, and technical resources;

(3) A statement of the fields of use for which applicant intends to practice the invention; and

(4) A statement of the geographic areas in which applicant intends to manufacture any products embodying the invention and geographic areas where applicant intends to use or sell the invention, or both;

(i) Identification of licenses previously granted to applicant under Federally owned inventions;

(j) A statement containing applicant's best knowledge of the extent to which the invention is being practiced by private industry or Government, or both, or is otherwise available commercially; and

(k) Any other information which applicant believes will support a determination to grant the license to applicant.

§ 1245.208 Processing applications.

(a) Applications for licenses will be initially reviewed by the Patent Counsel of the NASA installation having responsibility for the invention. The Patent Counsel shall make a preliminary recommendation to the Director of Licensing, NASA Headquarters, whether to: (1) grant the license as requested, (2) grant the license with modification after negotiation with the licensee, or (3) deny the license. The Director of Licensing shall review the preliminary recommendation of the Patent Counsel and make a final recommendation to the NASA Assistant General Counsel for Patent Matters. Such review and final recommendation may include, and be based on, any additional information obtained from applicant and other sources that the Patent Counsel and the Director of Licensing deem relevant to

the license requested. The determination to grant or deny the license shall be made by the Assistant General Counsel for Patent Matters based on the final recommendation of the Director of Licensing.

(b) When notice of a prospective exclusive or partially exclusive license is published in the *Federal Register* in accordance with § 1245.206(a)(1)(iii)(A) or § 1245.206(b)(1)(i), any written objections received in response thereto will be considered by the Director of Licensing in making the final recommendation to the Assistant General Counsel for Patent Matters.

(c) If the requested license, including any negotiated modifications, is denied by the Assistant General Counsel for Patent Matters, the applicant may request reconsideration by filing a written request for reconsideration within 30 days after receiving notice of denial. This 30-day period may be extended for good cause.

(d) In addition to, or in lieu of requesting reconsideration, the applicant may also appeal the denial of the license in accordance with § 1245.211.

§ 1245.209 Notice to Attorney General.

A copy of the notice provided for in §§ 1245.206(a)(1)(iii)(A), and 1245.206(b)(1)(i) will be sent to the Attorney General.

§ 1245.210 Modification and termination of licenses.

Before modifying or terminating a license, other than by mutual agreement, NASA shall furnish the licensee and any sublicensee of record a written notice of intention to modify or terminate the license, and the licensee and any sublicensee shall be allowed 30 days after such notice to remedy any breach of the license or show cause why the license should not be modified or terminated.

§ 1245.211 Appeals.

(a) The following parties may appeal to the NASA Administrator or designee any decision or determination concerning the grant, denial, interpretation, modification, or termination of a license:

(1) A person whose application for a license has been denied;

(2) A licensee whose license has been modified or terminated, in whole or in part; or

(3) A person who timely filed a written objection in response to the notice required by §§ 1245.206(a)(1)(iii)(A) or

1245.206(b)(1)(i) and who can demonstrate to the satisfaction of NASA that such person may be damaged by the Agency action.

(b) Written notice of appeal must be filed within 30 days (or such other time as may be authorized for good cause shown) after receiving notice of the adverse decision or determination; including, an adverse decision following the request for reconsideration under § 1245.208(c). The notice of appeal, along with all supporting documentation should be addressed to the Administrator, National Aeronautics and Space Administration, Washington, DC 20546. Should the appeal raise a genuine dispute over material facts, fact-finding will be conducted by the NASA Inventions and Contributions Board. The person filing the appeal shall be

afforded an opportunity to be heard and to offer evidence in support of the appeal. The Chairperson of the Inventions and Contributions Board shall prepare written findings of fact and transmit them to the Administrator or designee. The decision on the appeal shall be made by the NASA Administrator or designee. There is no further right of administrative appeal from the decision of the Administrator or designee.

§ 1245.212 Protection and administration of inventions.

NASA may take any suitable and necessary steps to protect and administer rights to NASA inventions, either directly or through contract.

§ 1245.213 Transfer of custody.

NASA having custody of certain Federally owned inventions may transfer custody and administration in whole or in part, to another Federal agency, of the right, title, or interest in any such invention.

§ 1245.214 Confidentiality of information.

Title 35, United States Code, section 209, provides that any plan submitted pursuant to § 1245.207(h) and any report required by § 1245.204(b)(6) may be treated by NASA as commercial and financial information obtained from a person and privileged and confidential and not subject to disclosure under section 552 of Title 5 of the United States Code.

James M. Beggs,
Administrator.

October 15, 1981.

[FR Doc. 81-31609 Filed 10-30-81; 8:45 am]

BILLING CODE 7510-01-M

FOREIGN PATENT LICENSING REGULATIONS

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Subject Categories

(1969 - 1973)

01 Aerodynamics

Includes aerodynamics of bodies, combinations, internal flow in ducts and turbomachinery; wings, rotors, and control surfaces. For applications see: 02 Aircraft and 32 Space Vehicles. For related information see also: 12 Fluid Mechanics; and 33 Thermodynamics and Combustion.

02 Aircraft

Includes fixed-wing airplanes, helicopters, gliders, balloons, ornithopters, etc.; and specific types of complete aircraft (e.g., ground effect machines, STOL, and VTOL); flight tests; operating problems (e.g., sonic boom); safety and safety devices; economics; and stability and control. For basic research see: 01 Aerodynamics. For related information see also: 31 Space Vehicles; and 32 Structural Mechanics.

03 Auxiliary Systems

Includes fuel cells, energy conversion cells, and solar cells; auxiliary gas turbines; hydraulic, pneumatic and electrical systems; actuators; and inverters. For related information see also: 09 Electronic Equipment; 22 Nuclear Engineering; and 28 Propulsion Systems.

04 Biosciences

Includes aerospace medicine, exobiology, radiation effects on biological systems; physiological and psychological factors. For related information see also: 05 Biotechnology.

05 Biotechnology

Includes life support systems, human engineering; protective clothing and equipment; crew training and evaluation, and piloting. For related information see also: 04 Biosciences.

06 Chemistry

Includes chemical analysis and identification (e.g., spectroscopy). For applications see: 17 Materials, Metallic; 18 Materials, Nonmetallic; and 27 Propellants.

07 Communications

Includes communications equipment and techniques; noise; radio and communications blackout; modulation telemetry; tracking radar and optical observation; and wave propagation. For basic research see: 23 Physics, General; and 21 Navigation.

08 Computers

Includes computer operation and programming; and data processing. For applications, see specific categories. For related information see also: 19 Mathematics.

09 Electronic Equipment

Includes electronic test equipment and maintainability; component parts, e.g., electron tubes, tunnel diodes, transistors, integrated circuitry; microminiaturization. For basic research see: 10 Electronics. For related information see also: 07 Communications and 21 Navigation.

10 Electronics

Includes circuit theory; and feedback and control theory. For applications see: 09 Electronic Equipment. For related information see specific Physics categories.

11 Facilities, Research and Support

Includes airports; lunar and planetary bases including associated vehicles; ground support systems; related logistics; simulators; test facilities (e.g., rocket engine test stands, shock tubes, and wind tunnels); test ranges; and tracking stations.

12 Fluid Mechanics

Includes boundary-layer flow; compressible flow; gas dynamics; hydrodynamics; and turbulence. For related information see also: 01 Aerodynamics; and 33 Thermodynamics and Combustion.

13 Geophysics

Includes aeronomy; upper and lower atmosphere studies; oceanography; cartography; and geodesy. For related information see also: 20 Meteorology; 29 Space Radiation; and 30 Space Sciences.

14 Instrumentation and Photography

Includes design, installation, and testing of instrumentation systems; gyroscopes; measuring instruments and gages; recorders, transducers; aerial photography; and telescopes and cameras.

15 Machine Elements and Processes

Includes bearings, seals, pumps, and other mechanical equipment; lubrication, friction, and wear; manufacturing processes and quality control; reliability; drafting; and materials fabrication, handling, and inspection.

16 Masers

Includes applications of masers and lasers. For basic research see: 26 Physics, Solid-State.

17 Materials, Metallic

Includes cermets; corrosion; physical and mechanical properties of materials; metallurgy; and applications as structural materials. For basic research see: 06 Chemistry. For related information see also: 18 Materials, Nonmetallic; and 32 Structural Mechanics.

18 Materials, Nonmetallic

Includes corrosion; physical and mechanical properties of materials (e.g., plastics); and elastomers, hydraulic fluids, etc. For basic research see: 06 Chemistry. For related information see also: 17 Materials, Metallic; 27 Propellants; and 32 Structural Mechanics.

19 Mathematics

Includes calculation methods and theory; and numerical analysis. For applications see specific categories. For related information see also: 08 Computers.

20 Meteorology

Includes climatology; weather forecasting; and visibility studies. For related information see also: 13 Geophysics; and 30 Space Sciences.

21 Navigation

Includes guidance; autopilots; star and planet tracking; inertial platforms; and air traffic control. For related information see also: 07 Communications.

22 Nuclear Engineering

Includes nuclear reactors and nuclear heat sources used for propulsion and auxiliary power. For basic research see: 24 Physics, Atomic, Molecular, and Nuclear. For related information see also: 03 Auxiliary Systems; and 28 Propulsion Systems.

23 Physics, General

Includes acoustics, cryogenics, mechanics, and optics. For astrophysics see: 30 Space Sciences. For geophysics and related information see also: 13 Geophysics, 20 Meteorology, and 29 Space Radiation.

24 Physics, Atomic, Molecular, and Nuclear

Includes atomic, molecular and nuclear physics. For applications see: 22 Nuclear Engineering. For related information see also: 29 Space Radiation.

25 Physics, Plasma

Includes magnetohydrodynamics. For applications see: 28 Propulsion Systems.

26 Physics, Solid-State

Includes semiconductor theory; and superconductivity. For applications see: 16 Masers. For related information see also: 10 Electronics.

27 Propellants

Includes fuels; igniters; and oxidizers. For basic re-

search see: 06 Chemistry; and 33 Thermodynamics and Combustion. For related information see also: 28 Propulsion Systems.

28 Propulsion Systems

Includes air breathing, electric, liquid, solid, and magnetohydrodynamic propulsion. For nuclear propulsion see: 22 Nuclear Engineering. For basic research see: 23 Physics, General; and 33 Thermodynamics and Combustion. For applications see: 31 Space Vehicles. For related information see also: 27 Propellants.

29 Space Radiation

Includes cosmic radiation; solar flares; solar radiation; and Van Allen radiation belts. For related information see also: 13 Geophysics, and 24 Physics, Atomic, Molecular, and Nuclear.

30 Space Sciences

Includes astronomy and astrophysics; cosmology; lunar and planetary flight and exploration; and theoretical analysis of orbits and trajectories. For related information see also: 11 Facilities, Research and Support; and 31 Space Vehicles.

31 Space Vehicles

Includes launch vehicles; manned space capsules; clustered and multistage rockets; satellites; sounding rockets and probes; and operating problems. For basic research see: 30 Space Sciences. For related information see also: 28 Propulsion Systems; and 32 Structural Mechanics.

32 Structural Mechanics

Includes structural element design and weight analysis; fatigue; thermal stress; impact phenomena; vibration; flutter; inflatable structures; and structural tests. For related information see also: 17 Materials, Metallic; and 18 Materials, Nonmetallic.

33 Thermodynamics and Combustion

Includes ablation, cooling, heating, heat transfer, thermal balance, and other thermal effects; and combustion theory. For related information see also: 12 Fluid Mechanics; and 27 Propellants.

34 General

Includes information of a broad nature related to industrial applications and technology, and to basic research; defense aspects; information retrieval; management; law and related legal matters; and legislative hearings and documents.

TABLE OF CONTENTS

Section 1 • Abstracts

Subject Categories (1974 -)

AERONAUTICS

Includes aeronautics (general); aerodynamics; air transportation and safety; aircraft communications and navigation; aircraft design, testing and performance; aircraft instrumentation; aircraft propulsion and power; aircraft stability and control; and research and support facilities (air).

For related information see also *Astronautics*.

01 AERONAUTICS (GENERAL)

02 AERODYNAMICS

Includes aerodynamics of bodies, combinations, wings, rotors, and control surfaces; and internal flow in ducts and turbomachinery.

For related information see also *34 Fluid Mechanics and Heat Transfer*.

03 AIR TRANSPORTATION AND SAFETY

Includes passenger and cargo air transport operations; and aircraft accidents.

For related information see also *16 Space Transportation* and *85 Urban Technology and Transportation*.

04 AIRCRAFT COMMUNICATIONS AND NAVIGATION

Includes digital and voice communication with aircraft; air navigation systems (satellite and ground based); and air traffic control.

For related information see also *17 Spacecraft Communications, Command and Tracking* and *32 Communications*.

05 AIRCRAFT DESIGN, TESTING AND PERFORMANCE

Includes aircraft simulation technology.

For related information see also *18 Spacecraft Design, Testing and Performance* and *39 Structural Mechanics*.

06 AIRCRAFT INSTRUMENTATION

Includes cockpit and cabin display devices; and flight instruments.

For related information see also *19 Spacecraft Instrumentation* and *35 Instrumentation and Photography*.

07 AIRCRAFT PROPULSION AND POWER

Includes prime propulsion systems and systems components, e.g., gas turbine engines and compressors; and on-board auxiliary power plants for aircraft.

For related information see also *20 Spacecraft Propulsion and Power*, *28 Propellants and Fuels*, and *44 Energy Production and Conversion*.

08 AIRCRAFT STABILITY AND CONTROL

Includes aircraft handling qualities; piloting; flight controls; and autopilots.

09 RESEARCH AND SUPPORT FACILITIES (AIR)

Includes airports, hangars and runways; aircraft repair and overhaul facilities; wind tunnels; shock tube facilities; and engine test blocks.

For related information see also *14 Ground Support Systems and Facilities (Space)*.

ASTRONAUTICS

Includes astronautics (general); astrodynamics; ground support systems and facilities (space); launch vehicles and space vehicles; space transportation; spacecraft communications, command and tracking; spacecraft design; testing and performance; spacecraft instrumentation; and spacecraft propulsion and power.

For related information see also *Aeronautics*.

12 ASTRONAUTICS (GENERAL)

For extraterrestrial exploration see *91 Lunar and Planetary Exploration*.

13 ASTRODYNAMICS

Includes powered and free-flight trajectories; and orbit and launching dynamics.

14 GROUND SUPPORT SYSTEMS AND FACILITIES (SPACE)

Includes launch complexes, research and production facilities; ground support equipment, e.g., mobile transporters; and simulators.

For related information see also *09 Research and Support Facilities (Air)*.

15 LAUNCH VEHICLES AND SPACE VEHICLES

Includes boosters; manned orbital laboratories; reusable vehicles; and space stations.

16 SPACE TRANSPORTATION

Includes passenger and cargo space transportation, e.g., shuttle operations; and rescue techniques.

For related information see also *03 Air Transportation and Safety* and *85 Urban Technology and Transportation*.

17 SPACECRAFT COMMUNICATION, COMMAND AND TRACKING

Includes telemetry; space communications networks; astronavigation; and radio blackout.

For related information see also *04 Aircraft Communications and Navigation* and *32 Communications*.

18 SPACECRAFT DESIGN, TESTING AND PERFORMANCE

Includes spacecraft thermal and environmental control; and attitude control.

For life support systems see *54 Man/System Technology and Life Support*. For related information see also *05 Aircraft Design, Testing and Performance* and *39 Structural Mechanics*.

19 SPACECRAFT INSTRUMENTATION

For related information see also *06 Aircraft Instrumentation* and *35 Instrumentation and Photography*.

20 SPACECRAFT PROPULSION AND POWER

Includes main propulsion systems and components, e.g., rocket engines; and spacecraft auxiliary power sources.

For related information see also *07 Aircraft Propulsion and Power*, *28 Propellants and Fuels*, and *44 Energy Production and Conversion*.

CHEMISTRY AND MATERIALS

Includes chemistry and materials (general); composite materials; inorganic and physical chemistry; metallic materials; nonmetallic materials; and propellants and fuels.

23 CHEMISTRY AND MATERIALS (GENERAL)

Includes biochemistry and organic chemistry.

24 COMPOSITE MATERIALS

Includes laminates.

25 INORGANIC AND PHYSICAL CHEMISTRY

Includes chemical analysis, e.g., chromatography; combustion theory; electrochemistry; and photochemistry.

For related information see also *77 Thermodynamics and Statistical Physics*.

26 METALLIC MATERIALS

Includes physical, chemical, and mechanical properties of metals, e.g., corrosion; and metallurgy.

27 NONMETALLIC MATERIALS

Includes physical, chemical, and mechanical properties of plastics, elastomers, lubricants, polymers, textiles, adhesives, and ceramic materials.

28 PROPELLANTS AND FUELS

Includes rocket propellants, igniters, and oxidizers; storage and handling; and aircraft fuels.

For related information see also *07 Aircraft Propulsion and Power*, *20 Spacecraft Propulsion and Power*, and *44 Energy Production and Conversion*.

ENGINEERING

Includes engineering (general); communications; electronics and electrical engineering; fluid mechanics and heat transfer; instrumentation and photography; lasers and masers; mechanical engineering; quality assurance and reliability; and structural mechanics.

For related information see also *Physics*.

31 ENGINEERING (GENERAL)

Includes vacuum technology; control engineering; display engineering; and cryogenics.

32 COMMUNICATIONS

Includes land and global communications; communications theory; and optical communications.

For related information see also *04 Aircraft Communications and Navigation* and *17 Spacecraft Communications, Command and Tracking*.

33 ELECTRONICS AND ELECTRICAL ENGINEERING

Includes test equipment and maintainability; components, e.g., tunnel diodes and transistors; micro-miniaturization; and integrated circuitry.

For related information see also *60 Computer Operations and Hardware* and *76 Solid-State Physics*.

34 FLUID MECHANICS AND HEAT TRANSFER

Includes boundary layers; hydrodynamics; fluidics; mass transfer; and ablation cooling.

For related information see also *02 Aerodynamics* and *77 Thermodynamics and Statistical Physics*.

35 INSTRUMENTATION AND PHOTOGRAPHY

Includes remote sensors; measuring instruments and gages; detectors; cameras and photographic supplies; and holography.

For aerial photography see *43 Earth Resources*. For related information see also *06 Aircraft Instrumentation* and *19 Spacecraft Instrumentation*.

36 LASERS AND MASERS

Includes parametric amplifiers.

37 MECHANICAL ENGINEERING

Includes auxiliary systems (non-power); machine elements and processes; and mechanical equipment.

38 QUALITY ASSURANCE AND RELIABILITY

Includes product sampling procedures and techniques; and quality control.

39 STRUCTURAL MECHANICS

Includes structural element design and weight analysis; fatigue; and thermal stress.

For applications see *05 Aircraft Design, Testing and Performance* and *18 Spacecraft Design, Testing and Performance*.

GEOSCIENCES

Includes geosciences (general); earth resources; energy production and conversion; environment pollution; geophysics; meteorology and climatology; and oceanography.

For related information see also *Space Sciences*.

42 GEOSCIENCES (GENERAL)

43 EARTH RESOURCES

Includes remote sensing of earth resources by aircraft and spacecraft; photogrammetry; and aerial photography.

For instrumentation see *35 Instrumentation and Photography*.

44 ENERGY PRODUCTION AND CONVERSION

Includes specific energy conversion systems, e.g., fuel cells and batteries; global sources of energy; fossil fuels; geophysical conversion; hydroelectric power; and wind power.

For related information see also *07 Aircraft Propulsion and Power*, *20 Spacecraft Propulsion and Power*, *28 Propellants and Fuels*, and *85 Urban Technology and Transportation*.

45 ENVIRONMENT POLLUTION

Includes air, noise, thermal and water pollution; environment monitoring; and contamination control.

46 GEOPHYSICS

Includes aeronomy; upper and lower atmosphere studies; ionospheric and magnetospheric physics; and geomagnetism.

For space radiation see *93 Space Radiation*.

47 METEOROLOGY AND CLIMATOLOGY

Includes weather forecasting and modification.

48 OCEANOGRAPHY

Includes biological, dynamic and physical oceanography; and marine resources.

LIFE SCIENCES

Includes sciences (general); aerospace medicine; behavioral sciences; man/system technology and life support; and planetary biology.

51 LIFE SCIENCES (GENERAL)

Includes genetics.

52 AEROSPACE MEDICINE

Includes physiological factors; biological effects of radiation; and weightlessness.

53 BEHAVIORAL SCIENCES

Includes psychological factors; individual and group behavior; crew training and evaluation; and psychiatric research.

54 MAN/SYSTEM TECHNOLOGY AND LIFE SUPPORT

Includes human engineering; biotechnology; and space suits and protective clothing.

55 PLANETARY BIOLOGY

Includes exobiology; and extraterrestrial life.

MATHEMATICAL AND COMPUTER SCIENCES

Includes mathematical and computer sciences (general); computer operations and hardware; computer programming and software; computer systems; cybernetics; numerical analysis; statistics and probability; systems analysis; and theoretical mathematics.

59 MATHEMATICAL AND COMPUTER SCIENCES (GENERAL)

60 COMPUTER OPERATIONS AND HARDWARE

Includes computer graphics and data processing. For components see *33 Electronics and Electrical Engineering*.

61 COMPUTER PROGRAMMING AND SOFTWARE

Includes computer programs, routines, and algorithms.

62 COMPUTER SYSTEMS

Includes computer networks.

63 CYBERNETICS

Includes feedback and control theory.

For related information see also *54 Man/System Technology and Life Support*.

64 NUMERICAL ANALYSIS

Includes iteration, difference equations, and numerical approximation.

65 STATISTICS AND PROBABILITY

Includes data sampling and smoothing; Monte Carlo method; and stochastic processes.

66 SYSTEMS ANALYSIS

Includes mathematical modeling; network analysis; and operations research.

67 THEORETICAL MATHEMATICS

Includes topology and number theory.

PHYSICS

Includes physics (general); acoustics; atomic and molecular physics; nuclear and high-energy physics; optics; plasma physics; solid-state physics; and thermodynamics and statistical physics.

For related information see also *Engineering*.

70 PHYSICS (GENERAL)

For geophysics see *46 Geophysics*. For astrophysics see *90 Astrophysics*. For solar physics see *92 Solar Physics*.

71 ACOUSTICS

Includes sound generation, transmission, and attenuation.

For noise pollution see *45 Environment Pollution*.

72 ATOMIC AND MOLECULAR PHYSICS

Includes atomic structure and molecular spectra.

73 NUCLEAR AND HIGH-ENERGY PHYSICS

Includes elementary and nuclear particles; and reactor theory.

For space radiation see *93 Space Radiation*.

74 OPTICS

Includes light phenomena.

75 PLASMA PHYSICS

Includes magnetohydrodynamics and plasma fusion.

For ionospheric plasmas see *46 Geophysics*. For space plasmas see *90 Astrophysics*.

76 SOLID-STATE PHYSICS

Includes superconductivity.

For related information see also *33 Electronics and Electrical Engineering* and *36 Lasers and Masers*.

77 THERMODYNAMICS AND STATISTICAL PHYSICS

Includes quantum mechanics; and Bose and Fermi statistics.

For related information see also *25 Inorganic and Physical Chemistry* and *34 Fluid Mechanics and Heat Transfer*.

SOCIAL SCIENCES

Includes social sciences (general); administration and management; documentation and information science; economics and cost analysis; law and political science; and urban technology and transportation.

80 SOCIAL SCIENCES (GENERAL)

Includes educational matters.

81 ADMINISTRATION AND MANAGEMENT

Includes management planning and research.

82 DOCUMENTATION AND INFORMATION SCIENCE **N.A.**

Includes information storage and retrieval technology; micrography; and library science.

For computer documentation see *61 Computer Programming and Software*.

83 ECONOMICS AND COST ANALYSIS **N.A.**

Includes cost effectiveness studies.

84 LAW AND POLITICAL SCIENCE **N.A.**

Includes space law; international law; international cooperation; and patent policy.

85 URBAN TECHNOLOGY AND TRANSPORTATION **N.A.**

Includes applications of space technology to urban problems; technology transfer; technology assessment; and surface and mass transportation.

For related information see *03 Air Transportation and Safety*, *16 Space Transportation*, and *44 Energy Production and Conversion*.

SPACE SCIENCES

Includes space sciences (general); astronomy; astrophysics; lunar and planetary exploration; solar physics; and space radiation.

For related information see also *Geosciences*.

88 SPACE SCIENCES (GENERAL) **N.A.**

89 ASTRONOMY **N.A.**

Includes radio and gamma-ray astronomy; celestial mechanics; and astrometry.

90 ASTROPHYSICS **N.A.**

Includes cosmology; and interstellar and interplanetary gases and dust.

91 LUNAR AND PLANETARY EXPLORATION **N.A.**

Includes planetology; and manned and unmanned flights.

For spacecraft design see *18 Spacecraft Design, Testing and Performance*. For space stations see *15 Launch Vehicles and Space Vehicles*.

92 SOLAR PHYSICS **N.A.**

Includes solar activity, solar flares, solar radiation and sunspots.

93 SPACE RADIATION **N.A.**

Includes cosmic radiation; and inner and outer earth's radiation belts.

For biological effects of radiation see *52 Aerospace Medicine*. For theory see *73 Nuclear and High-Energy Physics*.

GENERAL

99 GENERAL **N.A.**

Section 2 • Indexes

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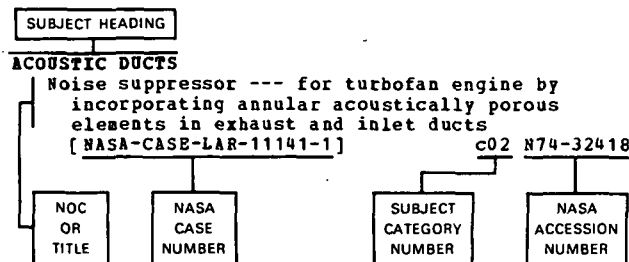
Subject Index

NASA PATENT ABSTRACTS BIBLIOGRAPHY

JANUARY 1982

Section 2

Typical Subject Index Listing



The subject heading is the key to the subject content of the document. A brief description of the document, e.g., title, title plus a title extension, or Notation of Content (NOC), is included for each subject entry to indicate the subject heading context: these descriptions are arranged under each subject heading in ascending accession number order. The NASA Case Number serves as the prime access number to the patent documents. The Subject Category Number indicates the category in Section 1 (Abstracts) in which the patent citation and abstract are located. The NASA accession number denotes the number by which the citation is identified within the subject

A

ABILITIES

Kinesimetric method and apparatus
[NASA-CASE-MSC-18929-1] c54 N81-15699

ABLATION

Transpirationally cooled heat ablation system for interplanetary spacecraft reentry shielding
[NASA-CASE-XMS-02677] c31 N70-42075

Hypersonic test facility for studying ablation in models under high pressure and high temperature
[NASA-CASE-XLA-00378] c11 N71-15925

Design of hypersonic test facility for ablation tests and performance tests of vehicles under conditions of high temperature and pressure
[NASA-CASE-XLA-05378] c11 N71-21475

Ablation sensor for measuring char layer recession rate using electric wires
[NASA-CASE-XLA-01794] c33 N71-21586

Ablation sensor for measuring surface ablation rate of material on vehicles entering earth's atmosphere on entry into planetary atmospheres
[NASA-CASE-XLA-01791] c14 N71-22991

Ablative system with liquid carrying ablative material bodies and forming self-replacing ablative surface
[NASA-CASE-LEW-10359] c33 N72-25911

ABLATIVE MATERIALS

Filling honeycomb matrix with deaerated paste filler
[NASA-CASE-XMS-01108] c15 N69-24322

Sensor device with switches for measuring surface recession of charring and noncharring ablators
[NASA-CASE-XLA-01781] c14 N69-39975

Vacuum method for molding thermosetting compounds used as ablative materials
[NASA-CASE-XLA-01091] c15 N71-10672

Ablative resins used for retarding regression in ablative material
[NASA-CASE-XLE-05913] c33 N71-14032

Design, development, and characteristics of ablation structures
[NASA-CASE-XMS-01816] c33 N71-15623

Method and apparatus for fabrication of heat insulating and ablative reentry structure
[NASA-CASE-XMS-02009] c33 N71-20834

Production and application of sprayable fiber reinforced ablation material
[NASA-CASE-XLA-04251] c18 N71-26100

Ablative heat shield for protection from aerodynamic heating of reentry spacecraft

[NASA-CASE-MSC-12143-1] c33 N72-17947
Ablative system with liquid carrying ablative material bodies and forming self-replacing ablative surface
[NASA-CASE-LEW-10359] c33 N72-25911
Carrier liquid system containing bodies of ablative material
[NASA-CASE-LEW-10359-2] c33 N73-25952
Ablation article and surface for analyzing flow transition on ablative surface
[NASA-CASE-LAR-10439-1] c33 N73-27796
Dual measurement ablation sensor
[NASA-CASE-LAR-10105-1] c34 N74-15652
Sprayable low density ablator and application process
[NASA-CASE-MFS-23506-1] c24 N78-24290
Intumescent-ablator coatings using endothermic fillers
[NASA-CASE-ARC-11043-1] c24 N78-27180
Cork-resin ablative insulation for complex surfaces and method for applying the same
[NASA-CASE-MFS-23626-1] c24 N80-26388

ABORT APPARATUS
Coupling device for linear shaped charge for space vehicle abort system
[NASA-CASE-XLA-00189] c33 N70-36846

ABRASION RESISTANCE
Zinc dust formulation for abrasion resistant steel coatings
[NASA-CASE-GSC-10361-1] c18 N72-23581
Abrasion resistant coatings for plastic surfaces
[NASA-CASE-ARC-10915-3] c24 N77-24200
Process for producing a well-adhered durable optical coating on an optical plastic substrate --- abrasion resistant polymethyl methacrylate lenses
[NASA-CASE-ARC-11039-1] c74 N78-32854
Heat sealable, flame and abrasion resistant coated fabric
[NASA-CASE-MSC-18382-1] c27 N80-24440
Sandblasting nozzle
[NASA-CASE-NPO-13823-1] c37 N81-25371

ABSORBENTS
Absorbent apparatus for separating gas from liquid-gas stream used in environmental control under zero gravity conditions
[NASA-CASE-XMS-01492] c05 N70-41297
Fluid flow control valve for regulating fluids in molecular quantities
[NASA-CASE-XLE-00703] c15 N71-15967
Noncontaminating swab with absorbent end covered with netted envelope to prevent egress of absorbent material
[NASA-CASE-MFS-18100] c15 N72-11390
Protein sterilization of firefly luciferase without denaturation
[NASA-CASE-GSC-10225-1] c06 N73-27086
Oil and fat absorbing polymers
[NASA-CASE-NPO-11609-2] c27 N77-31308

ABSORBERS (EQUIPMENT)
Absorbent product and articles made therefrom --- for collection of human wastes
[NASA-CASE-MSC-18223-1] c24 N81-16127

ABSORBERS (MATERIALS)
Broadband chokes and absorbers to reduce spurious radiation patterns of antenna array caused by support structures
[NASA-CASE-XMS-05303] c07 N69-27462
Analytical photoionization mass spectrometer with argon gas filter between light source and monochromator
[NASA-CASE-LAR-10180-1] c06 N71-13461
Development of filter system for control of outgas contamination in vacuum conditions using absorbent beds of molecular sieve

SUBJECT

ABSORPTION

SUBJECT INDEX

zeolite, silica gel, and charcoal
[NASA-CASE-NPS-14711] c15 N71-26185

Development and characteristics of calorimeter
with integral heat sink for maintenance of
constant temperature
[NASA-CASE-XMP-04208] c33 N71-29051

Aldehyde-containing urea-absorbing polysaccharides
[NASA-CASE-NPO-13620-1] c27 N77-30236

Electromagnetic power absorber
[NASA-CASE-NPO-13830-1] c32 N80-14281

ABSORPTION
Differential optoacoustic absorption detector
[NASA-CASE-NPO-13759-1] c74 N78-17867

ABSORPTION CROSS SECTIONS
Radiation source and detection system for
measuring amount of liquid inside tanks
independently of liquid configuration
[NASA-CASE-MSC-12280] c27 N71-16348

ABSORPTION SPECTRA
Stark effect spectrophone for continuous
absorption spectra monitoring --- a technique
for gas analysis
[NASA-CASE-NPO-15102-1] c25 N81-25159

ABSORPTIVITY
Detector absorptivity measuring method and
apparatus
[NASA-CASE-LAR-10907-1] c35 N76-29551

AC GENERATORS
Alternating current signal generator providing
plurality of amplitude modulated output signals
[NASA-CASE-XNP-05612] c09 N69-21468

Improved alternator with windings of
superconducting materials acting as permanent
magnet
[NASA-CASE-XLE-02824] c03 N69-39890

Superconducting alternator design with cryogenic
fluid for cooling windings below critical
temperature
[NASA-CASE-XLE-02823] c09 N71-23443

Solar cell system having alternating current
output
[NASA-CASE-LEW-12806-1] c44 N78-25553

ACCELERATION
Single grid accelerator system for electron
bombardment type ion thruster
[NASA-CASE-XLE-01453-2] c28 N73-27699

ACCELERATION (PHYSICS)
Centrifuge mounted motion simulator with
elevator mechanism
[NASA-CASE-XAC-00399] c11 N70-34815

Gravity device for accurate and rapid indication
of relative gravity conditions aboard
accelerating carrier
[NASA-CASE-XMP-00424] c11 N70-38196

Development of method for producing artificial
gravity in manned spacecraft
[NASA-CASE-XNP-02595] c31 N71-21881

Vibration control of flexible bodies in steady
accelerating environment
[NASA-CASE-LAR-10106-1] c15 N71-27169

G-load measuring and indicator apparatus --- for
aircraft
[NASA-CASE-ARC-10806] c06 N74-27872

Apparatus for applying simulator g-forces to an
arm of an aircraft simulator pilot
[NASA-CASE-LAR-10550-1] c09 N74-30597

G-load measuring and indicator apparatus
[NASA-CASE-ARC-10806-1] c35 N75-29381

Method of forming frozen spheres in a force-free
drop tower --- microballoons for inertial
confinement fusion
[NASA-CASE-NPO-14845-1] c31 N81-16328

Helmet weight simulator
[NASA-CASE-LAR-12320-1] c54 N81-27806

ACCELERATION PROTECTION
Astronaut restraint suit for high acceleration
protection
[NASA-CASE-XAC-00405] c05 N70-41819

Conditioning suit for normal function of
astronaut cardiovascular system in gravity
environment
[NASA-CASE-XLA-02898] c05 N71-20268

ACCELERATION STRESSES (PHYSIOLOGY)
Development of method for producing artificial
gravity in manned spacecraft
[NASA-CASE-XNP-02595] c31 N71-21881

ACCELERATION TOLERANCE
Electronic detection system for peak
acceleration limits in vibrational testing of

spacecraft components
[NASA-CASE-NPO-10556] c14 N71-27185

ACCELERATORS
Annular arc accelerator shock tube
[NASA-CASE-NPO-13528-1] c09 N77-10071

Spring operated accelerator and constant force
spring mechanism therefor
[NASA-CASE-ARC-10898-1] c35 N77-18417

ACCELEROMETERS
Superconductive accelerometer employing variable
force principle to determine acceleration of
bodies
[NASA-CASE-XMP-01099] c14 N71-15969

Describing device for velocity control of
electromechanical drive mechanism of scanning
mirror of interferometer
[NASA-CASE-XGS-03532] c14 N71-17627

Omnidirectional liquid filled accelerometer
design with liquid and housing temperature
compensation
[NASA-CASE-HQN-10780] c14 N71-30265

Development of combined velocimeter and
accelerometer based on color changes in liquid
crystalline material subjected to shear stresses
[NASA-CASE-ERC-10292] c14 N72-25410

Temperature compensated digital inertial sensor
--- circuit for maintaining inertial element
of gyroscope or accelerometer at constant
position
[NASA-CASE-NPO-13044-1] c35 N74-15094

Accelerometer telemetry system
[NASA-CASE-ARC-10849-1] c17 N76-29347

ACCEPTABILITY
Cross correlation anomaly detection system
[NASA-CASE-NPO-13283] c38 N78-17395

ACCEPTOR MATERIALS
III-V photocathode with nitrogen doping for
increased quantum efficiency
[NASA-CASE-NPO-12134-1] c33 N76-31409

ACCIDENT PREVENTION
CAT altitude avoidance system
[NASA-CASE-NPO-15351-1] c47 N81-16677

ACCUMULATORS
Direct radiation cooling of linear beam
collector tubes
[NASA-CASE-XNP-09227] c15 N69-24319

Regenerative cooling system for small rocket
engine having restart capability and using
noncryogenic hypergolic propellants
[NASA-CASE-XLE-00685] c28 N70-41992

Small plasma probe using tungsten wire collector
in tubular shield
[NASA-CASE-XLE-02578] c25 N71-20747

Electrostatic charged particle collector
containing stacked electrodes for microwave tube
[NASA-CASE-LEW-11192-1] c09 N73-13208

Accumulator
[NASA-CASE-NPS-19287-1] c34 N77-30399

Method for fabricating solar cells having
integrated collector grits
[NASA-CASE-LEW-12819-2] c44 N79-18444

Multistage depressed collector for dual node
operation --- for travelling wave tubes
[NASA-CASE-LEW-13282-1] c33 N79-32463

Urine collection device
[NASA-CASE-MSC-16433-1] c52 N81-24711

Urine collection apparatus --- feminine hygiene
[NASA-CASE-MSC-18381-1] c52 N81-28740

Sweat collection capsule
[NASA-CASE-ARC-11031-1] c52 N81-29763

ACETALS
Synthesis of schiff bases for heat shields by
acetal amine reactions
[NASA-CASE-XMP-08652] c06 N71-11243

ACETATES
Thermoplastic rubber comprising ethylene-vinyl
acetate copolymer, asphalt and fluxing oil
[NASA-CASE-NPO-08835-1] c27 N78-33228

ACETYLENE
Preparation of dicyanoacetylene and vinylidene
copolymers using organic compounds
[NASA-CASE-XNP-03250] c06 N71-23500

ACOUSTIC ATTENUATION
Ultrasonic calibration device --- for producing
changes in acoustic attenuation and phase
velocity
[NASA-CASE-LAR-11435-1] c35 N76-15432

ACOUSTIC DUCTS
Noise suppressor --- for turbofan engine by

- incorporating annular acoustically porous elements in exhaust and inlet ducts
[NASA-CASE-LAR-11141-1] c07 N74-32418
- ACOUSTIC IMPEDANCE**
Method and transducer device for detecting presence of hydrogen gas
[NASA-CASE-XNF-03873] c06 N69-39733
- ACOUSTIC LEVITATION**
Method and apparatus for shaping and enhancing acoustical levitation forces
[NASA-CASE-NFS-25050-1] c71 N81-15767
Acoustic suspension system
[NASA-CASE-NPO-15435-1] c71 N81-27887
- ACOUSTIC MEASUREMENTS**
Instrumentation for measuring aircraft noise and sonic boom
[NASA-CASE-LAR-11476-1] c07 N76-27232
Differential sound level meter
[NASA-CASE-LAR-12106-1] c71 N78-14867
Pseudo continuous wave instrument --- ultrasonics
[NASA-CASE-LAR-12260-1] c35 N79-10390
System for monitoring physical characteristics of fluids --- acoustic techniques
[NASA-CASE-NPO-15400-1] c34 N81-24384
- ACOUSTIC PROPAGATION**
Material suspension within an acoustically excited resonant chamber --- at near weightless conditions
[NASA-CASE-NPO-13263-1] c12 N75-24774
Resolution enhanced sound detecting apparatus
[NASA-CASE-NPO-14134-1] c71 N79-23753
- ACOUSTIC PROPERTIES**
Development of wind tunnel microphone structure to minimize effects of vibrations and eliminate unwanted signals in microphone output
[NASA-CASE-XNP-00250] c11 N71-28779
Acoustical transducer calibrating system including differential pressure activating device
[NASA-CASE-FRC-10060-1] c14 N73-27379
Pseudo continuous wave instrument --- ultrasonics
[NASA-CASE-LAR-12260-1] c35 N79-10390
- ACOUSTIC RETROFITTING**
Multiple pure tone elimination strut assembly
[NASA-CASE-FRC-11062-1] c07 N80-32393
- ACOUSTICAL HOLOGRAPHY**
Hybrid holographic non-destructive test system
[NASA-CASE-NFS-23114-1] c38 N78-32447
- ACOUSTO-OPTICS**
Acoustic vibration test apparatus for wiring harnesses
[NASA-CASE-MSC-15158-1] c14 N72-17325
Method and apparatus for background signal reduction in opto-acoustic absorption measurement
[NASA-CASE-NPO-13683-1] c35 N77-14411
Differential optoacoustic absorption detector
[NASA-CASE-NPO-13759-1] c74 N78-17867
Coherently pulsed laser source
[NASA-CASE-NPO-15111-1] c36 N80-24602
Stark cell optoacoustic detection of constituent gases in sample
[NASA-CASE-NPO-14143-1] c25 N81-14015
Stark effect spectrophone for continuous absorption spectra monitoring --- a technique for gas analysis
[NASA-CASE-NPO-15102-1] c25 N81-25159
- ABLATES**
Ablative resins used for retarding regression in ablative material
[NASA-CASE-XLE-05913] c33 N71-14032
- ACRYLIC RESINS**
Abrasion resistant coatings for plastic surfaces
[NASA-CASE-ARC-10915-3] c24 N77-24200
Method of carbonizing polyacrylonitrile fibers and resulting product
[NASA-CASE-ARC-11261-1] c24 N81-29164
- ACRYLONITRILES**
Method of carbonizing polyacrylonitrile fibers and resulting product
[NASA-CASE-ARC-11261-1] c24 N81-29164
- ACTIVATION ENERGY**
Heat activated emf cells with aluminum anode
[NASA-CASE-LEW-11359] c03 N71-28579
Heat activated cell with aluminum anode
[NASA-CASE-LEW-11359-2] c03 N72-20034
- ACTIVE CONTROL**
Linear magnetic bearings --- active magnetic suspension of armatures
- [NASA-CASE-GSC-12582-1] c37 N81-16469
- ACTUATOR DISKS**
Cryogenic gyroscope housing --- with annular disks for gas spin-up
[NASA-CASE-NFS-21136-1] c35 N74-18323
- ACTUATORS**
Electromechanical actuator and its use in rocket thrust control valve
[NASA-CASE-XNP-05975] c15 N69-23185
Power controlled bimetallic electromechanical actuator for accurate, timely, and reliable response to remote control signal
[NASA-CASE-XNP-09776] c09 N69-39929
Patent data on gas actuated bolt disconnect assembly
[NASA-CASE-XLA-00326] c03 N70-34667
Hermetically sealed explosive release mechanism for actuator device
[NASA-CASE-XGS-00824] c15 N71-16078
Burst diaphragm flow initiator for installation in short duration wind tunnels
[NASA-CASE-NFS-12915] c11 N71-17600
Hand controller operable about three respectively perpendicular axes and capable of actuating signal generators for attitude control devices
[NASA-CASE-XMS-07487] c15 N71-23255
Mechanical actuator wherein linear motion changes to rotational motion
[NASA-CASE-XGS-04548] c15 N71-24045
Hydraulic actuator design for space deployment of heat radiators
[NASA-CASE-MSC-11817-1] c15 N71-26611
Electromechanical control actuator system using double differential screws
[NASA-CASE-BRC-10022] c15 N71-26635
System to control speed of hydraulically movable members by limiting energy applied to actuators with hydraulic servo loop
[NASA-CASE-ARC-10131-1] c15 N71-27754
Zero power telemetry actuated switch for biomedical equipment
[NASA-CASE-ARC-10105] c09 N72-17153
Mechanically operated hand which can depress trigger using touch control device
[NASA-CASE-NFS-20413] c15 N72-21463
Hermetically sealed elbow actuator for use in severe environments
[NASA-CASE-NFS-14710] c09 N72-22195
Characteristics of lightweight actuator for imparting linear motion using elongated output shaft
[NASA-CASE-NPO-11222] c15 N72-25456
Rotary actuator for use in environments with no rolling and sliding friction
[NASA-CASE-NPO-10244] c15 N72-26371
Gas-operated actuator with cyclic motion of expansion chamber
[NASA-CASE-NPO-11340] c15 N72-33477
Redundant hydraulic control system for actuators with three main valve combination
[NASA-CASE-NFS-20944] c15 N73-13466
Actuator operated by electrolytic drive gas generator and evacuator
[NASA-CASE-NPO-11369] c15 N73-13467
Manual actuator --- for spacecraft exercising machines
[NASA-CASE-NFS-21481-1] c37 N74-18127
Optically actuated two position mechanical mover
[NASA-CASE-NPO-13105-1] c37 N74-21060
Dual output variable pitch turbofan actuation system
[NASA-CASE-LEW-12419-1] c07 N77-14025
Actuator device for artificial leg
[NASA-CASE-NFS-23225-1] c52 N77-14735
Cyclical bi-directional rotary actuator
[NASA-CASE-GSC-11883-1] c37 N77-19458
Actuator mechanism
[NASA-CASE-GSC-11883-2] c37 N78-31426
A hydraulic actuator mechanism to control aircraft spoiler movements through dual input commands
[NASA-CASE-LAR-12412-1] c05 N80-11065
Pressure limiting propellant actuating system
[NASA-CASE-MSC-18179-1] c20 N80-18097
Phase-angle controller for Stirling engines
[NASA-CASE-NPO-14388-1] c37 N81-17432
Electrical servo actuator bracket --- fuel control valves on jet engines

[NASA-CASE-FRC-11044-1] c37 N81-33483

ADAPTERS
 Camera adapter design for image magnification including lens and illuminator
 [NASA-CASE-XMF-03844-1] c14 N71-26474

ADAPTIVE CONTROL
 Self testing and repairing computer comprising control and diagnostic unit and rollback points for error correction
 [NASA-CASE-NPO-10567] c08 N71-24633
 Synchronous dc direct-drive system comprising multiple-loop hybrid control system controlling load directly connected to actuator
 [NASA-CASE-GSC-10065-1] c10 N71-27136
 Versatile ergometer with work load control
 [NASA-CASE-MFS-21109-1] c05 N73-27941
 Adaptive voting computer system
 [NASA-CASE-MSC-13932-1] c62 N74-14920
 Apparatus for damping operator induced oscillations of a controlled system --- using adaptive filters to damp oscillations in a flight control system
 [NASA-CASE-FRC-11041-1] c33 N80-20488
 Adaptive polarization separation
 [NASA-CASE-LAR-12196-1] c33 N81-26358
 Adaptive control system for line-commutated inverters
 [NASA-CASE-MFS-25209-1] c33 N81-31480
 Adaptive reference voltage generator for firing angle control of line-commutated inverters
 [NASA-CASE-MFS-25215-1] c33 N81-31481

ADAPTIVE FILTERS
 Adaptive notch filter, using modulation techniques for reversed phase noise signal
 [NASA-CASE-XMF-01892] c10 N71-22986
 Apparatus for damping operator induced oscillations of a controlled system --- using adaptive filters to damp oscillations in a flight control system
 [NASA-CASE-FRC-11041-1] c33 N80-20488

ADAPTIVE OPTICS
 Fluorescent radiation converter
 [NASA-CASE-GSC-12528-1] c74 N81-24900

ADDING CIRCUITS
 Circuit diagram and operation of full binary adder
 [NASA-CASE-XGS-00689] c08 N70-34787
 Error correction circuitry for binary signal channels
 [NASA-CASE-XNP-03263] c09 N71-18843

ADDITION RESINS
 Tackifier for addition polyimides containing monoethylphthalate
 [NASA-CASE-LAR-12642-1] c27 N81-29229

ADDITIVES
 Ammonium perchlorate composite propellant with organic Cu/II/ chelate catalytic additive
 [NASA-CASE-LAR-10173-1] c27 N71-14090
 Additive for zinc electrodes
 [NASA-CASE-LEW-13286-1] c44 N81-27597

ADENOSINE TRIPHOSPHATE
 Use of enzyme hexokinase and glucose to reduce inherent light levels of ATP in luciferase compositions
 [NASA-CASE-XGS-05533] c04 N69-27487
 Detection instrument for light emitted from ATP biochemical reaction
 [NASA-CASE-XGS-05534] c23 N71-16355
 Describing method for lyophilization of luciferase containing mixtures for use in life detection reactions
 [NASA-CASE-XGS-05532] c06 N71-17705
 Automatic device for assaying urine on bacterial adenosine triphosphate content
 [NASA-CASE-GSC-11169-2] c05 N73-32011
 Application of luciferase assay for ATP to antimicrobial drug susceptibility
 [NASA-CASE-GSC-12039-1] c51 N77-22794

ADHESION
 Tool for mounting and removing studs with adhesive coated head portion
 [NASA-CASE-MFS-20299] c15 N72-11392
 Improved refractory coatings --- sputtered coatings on substrates that form stable nitrides
 [NASA-CASE-LEW-23169-2] c26 N81-16209

ADHESION TESTS
 Apparatus for determining quality of bond between high density material and low density material
 [NASA-CASE-MFS-13686] c15 N71-18132

ADHESIVE BONDING

Fabrication of solar cell banks for attaching solar cells to base members or substrates
 [NASA-CASE-XNP-00826] c03 N71-20895
 Method for honeycomb panel bonding by thermosetting film adhesive with electrical heat means
 [NASA-CASE-XMF-01402] c18 N71-21651
 Etching aluminum alloys with aqueous solution containing sulfuric acid, hydrofluoric acid, and an alkali metal dischromate for adhesive bonding
 [NASA-CASE-XMF-02303] c17 N71-23828
 Adhesive spray process for attaching biomedical skin electrodes
 [NASA-CASE-XFR-07658-1] c05 N71-26293
 Bonding of sapphire to sapphire by eutectic mixture of aluminum oxide and zirconium oxide
 [NASA-CASE-GSC-11577-1] c37 N75-15992
 Weld-bonded titanium structures
 [NASA-CASE-LAR-11549-1] c37 N77-11397
 Method of adhering bone to a rigid substrate using a graphite fiber reinforced bone cement
 [NASA-CASE-NPO-13764-1] c27 N78-17215
 Thermal barrier coating system
 [NASA-CASE-LEW-12554-1] c34 N78-18355
 Thermal insulation attaching means --- adhesive bonding of felt vibration insulators under ceramic tiles
 [NASA-CASE-MSC-12619-2] c27 N79-12221
 Surface finishing
 [NASA-CASE-MSC-12631-3] c27 N81-14077
 Method of bonding plasticized elastomer to metal and article produced thereby
 [NASA-CASE-MFS-25181-1] c27 N81-16238
 Thermal barrier coating system having improved adhesion
 [NASA-CASE-LEW-13359-1] c27 N81-24265

ADHESIVES
 Polyimide adhesives
 [NASA-CASE-LAR-11397-1] c27 N75-29263
 Polyimide adhesives
 [NASA-CASE-LAR-12181-1] c27 N78-17205
 Crystalline polyimides --- reinforcing fibers for high temperature composites and adhesives as well as flame retardation
 [NASA-CASE-LAR-12099-1] c27 N80-16158

ADJUSTING
 Centering device with ultrafine adjustment for use with roundness measuring apparatus
 [NASA-CASE-XMF-00480] c14 N70-39898
 Slotted fine-adjustment support for optical devices
 [NASA-CASE-MFS-20249] c15 N72-11386
 Adjustable support device with jacket screw for altering distance between base and supported member
 [NASA-CASE-NPO-10721] c15 N72-27484
 Clock setter
 [NASA-CASE-LAR-11458-1] c35 N76-16392

AERIAL BUDDERS
 Thrust augmented spin recovery device
 [NASA-CASE-LAR-11970-2] c08 N81-19130

AEROACOUSTICS
 Acoustically swept rotor --- helicopter noise reduction
 [NASA-CASE-ARC-11106-1] c05 N80-14107

AERODYNAMIC BALANCE
 Apparatus for and method of compensating dynamic unbalance
 [NASA-CASE-GSC-12550-1] c37 N81-22358

AERODYNAMIC BRAKES
 Bluff-shaped annular configuration for supersonic decelerator for reentry vehicles
 [NASA-CASE-XLB-00222] c02 N70-37939
 Lightweight, variable solidity knitted parachute fabric --- for aerodynamic decelerators
 [NASA-CASE-LAR-10776-1] c02 N74-10034

AERODYNAMIC CHARACTERISTICS
 Variable aspect ratio and variable sweep delta wing planforms for supersonic aircraft
 [NASA-CASE-XLA-00221] c02 N70-33266
 Designing spacecraft for flight into space, atmospheric reentry, and landing at selected sites
 [NASA-CASE-XAC-02058] c02 N71-16087
 Spacecraft configurations and aerodynamic characteristics of space shuttle systems with two reusable stages

- [NASA-CASE-MSC-12433] c31 N73-14854
Airfoil shape for flight at subsonic speeds ---
design analysis and aerodynamic
characteristics of the GAW-1 airfoil
[NASA-CASE-LAR-10585-1] c02 N76-22154
Curved centerline air intake for a gas turbine
engine
[NASA-CASE-LEW-13201-1] c07 N81-14999
- AERODYNAMIC CONFIGURATIONS**
Supersonic aircraft configuration providing for
variable aspect ratio and variable sweep wings
[NASA-CASE-XLA-00166] c02 N70-34178
Aerodynamic configuration for aircraft capable
of high speed flight and low drag for low
speed takeoff or landing upon presently
existing airfields
[NASA-CASE-XLA-00806] c02 N70-34858
Manned space capsule configuration for orbital
flight and atmospheric reentry
[NASA-CASE-XLA-00149] c31 N70-37938
Aerodynamic configuration of reentry vehicle
heat shield to provide longitudinal and
directional stability at hypersonic velocities
[NASA-CASE-XMS-04142] c31 N70-41631
Development and characteristics of translating
horizontal tail assembly for supersonic aircraft
[NASA-CASE-XLA-08801-1] c02 N71-11043
Variable geometry manned orbital vehicle having
high aerodynamic efficiency over wide speed
range and incorporating auxiliary pivotal wings
[NASA-CASE-XLA-03691] c31 N71-15674
Afterburner-equipped jet engine nacelle with
slotted configuration afterbody
[NASA-CASE-XLA-10450] c28 N71-21493
Variable geometry rotor system for direct
control over wake vortex
[NASA-CASE-LAR-10557] c02 N72-11018
Development of auxiliary lifting system to
provide ferry capability for entry vehicles
[NASA-CASE-LAR-10574-1] c11 N73-13257
Multistage aerospace craft --- perspective
drawings of conceptual design
[NASA-CASE-XMF-02263] c05 N74-10907
Supersonic fan blading --- noise reduction in
turbofan engines
[NASA-CASE-LEW-11402-1] c07 N74-28226
Free wing assembly for an aircraft
[NASA-CASE-PRC-10092-1] c05 N79-12061
- AERODYNAMIC DRAG**
Skin friction measuring device for aircraft
[NASA-CASE-PRC-11029-1] c06 N81-17057
- AERODYNAMIC HEATING**
Development of thermal insulation system for
wing and control surfaces of hypersonic
aircraft and reentry vehicles
[NASA-CASE-XLA-00892] c33 N71-17897
Heat flux sensor adapted for mounting on
aircraft or spacecraft to measure aerodynamic
heat flux inflow to aircraft skin
[NASA-CASE-XFR-03802] c33 N71-23085
Ablative heat shield for protection from
aerodynamic heating of reentry spacecraft
[NASA-CASE-MSC-12143-1] c33 N72-17947
- AERODYNAMIC LOADS**
Directed fluid stream for propeller blade
loading control
[NASA-CASE-XAC-00139] c02 N70-34856
Means for controlling aerodynamically induced
twist --- equipment to control twisting of
slender wings due to aerodynamic loads
[NASA-CASE-LAR-12175-1] c05 N80-16055
- AERODYNAMIC NOISE**
Apparatus for reducing aerodynamic noise in a
wind tunnel
[NASA-CASE-MPS-23099-1] c09 N76-23273
Acoustically swept rotor --- helicopter noise
reduction
[NASA-CASE-ARC-11106-1] c05 N80-14107
Curved centerline air intake for a gas turbine
engine
[NASA-CASE-LEW-13201-1] c07 N81-14999
- AERODYNAMIC STABILITY**
Aerodynamically stable meteorological balloon
using surface roughness effect
[NASA-CASE-XMF-04163] c02 N71-23007
Pressure sensor network for measuring liquid
dynamic response in flight including fuel tank
acceleration, liquid slosh amplitude, and fuel
depth monitoring
- [NASA-CASE-XLA-05541] c12 N71-26387
Spacecraft design with single point aerodynamic
and hydrodynamic stability for emergency
transport of men from space station to
splashdown
[NASA-CASE-MSC-13281] c31 N72-18859
High lift aircraft --- with improved stability,
control, performance, and noise characteristics
[NASA-CASE-LAR-11252-1] c05 N75-25914
Hingeless helicopter rotor with improved stability
[NASA-CASE-ARC-10807-1] c05 N77-17029
An annular wing
[NASA-CASE-PRC-11007-2] c02 N79-24959
Aeroelastic instability stoppers for wind-tunnel
models
[NASA-CASE-LAR-12720-1] c09 N81-31229
- AERODYNAMIC STALLING**
Aerodynamic side-force alleviator means
[NASA-CASE-LAR-12326-1] c02 N81-14968
- AEROELASTICITY**
Aeroelastic instability stoppers for wind-tunnel
models
[NASA-CASE-LAR-12720-1] c09 N81-31229
Aeroelastic instability stoppers for wind-tunnel
models
[NASA-CASE-LAR-12458-1] c09 N81-31230
- AERONAUTICAL ENGINEERING**
Differential pressure cell insensitive to
changes in ambient temperature and extreme
overload
[NASA-CASE-XAC-00042] c14 N70-34816
- AEROSOLS**
Liquid aerosol dispenser with explosively driven
piston to compress light gas to extremely high
pressure
[NASA-CASE-MPS-20829] c12 N72-21310
Particulate and aerosol detector
[NASA-CASE-LAR-11434-1] c35 N76-22509
Thermoluminescent aerosol analysis
[NASA-CASE-LAR-12046-1] c25 N78-15210
- AEROSPACE ENGINEERING**
Modifying existing solar cells for temperature
control
[NASA-CASE-NPO-10109] c03 N71-11049
Metallic film diffusion for boundary lubrication
in aerospace engineering
[NASA-CASE-XLE-10337] c15 N71-24046
Soldering device particularly suited to making
high quality wiring joints for aerospace
engineering utilizing capillary attraction to
regulate flow of solder
[NASA-CASE-XLA-08911] c15 N71-27214
Installing fiber insulation
[NASA-CASE-MSC-16973-1] c37 N81-14317
- AEROSPACE ENVIRONMENTS**
High voltage insulators for direct current in
acceleration system of electrostatic thruster
[NASA-CASE-XLE-01902] c28 N71-10574
Metallic film diffusion into metal or ceramic
surfaces for boundary lubrication in aerospace
environments
[NASA-CASE-XLE-01765] c18 N71-10772
Preparation of inorganic solid film lubricants
with long wear life and stability in aerospace
environments
[NASA-CASE-XMF-03988] c15 N71-21403
Momentum-velocity analyzer for measuring minute
space particles
[NASA-CASE-XMS-04201] c14 N71-22990
Metal alloy bearing materials for space
applications
[NASA-CASE-XLE-05033] c15 N71-23810
Method and apparatus for adjusting thermal
conductance in electronic components for space
use
[NASA-CASE-XNP-05524] c33 N71-24876
Space environment simulator for testing
spacecraft components under aerospace conditions
[NASA-CASE-NFO-10141] c11 N71-24964
High dc switch for causing abrupt, cyclic,
decreases of current to operate under zero or
varying gravity conditions
[NASA-CASE-LEW-10155-1] c09 N71-29035
Automatic biowaste sampling
[NASA-CASE-MSC-14640-1] c54 N76-14804
Wobble gear drive mechanism --- for aerospace
environments
[NASA-CASE-WOO-00625] c37 N78-17385

- Plasma cleaning device --- designed for high vacuum environments
[NASA-CASE-MFS-22906-1] c75 N78-27913
- Process for spinning flame retardant elastomeric compositions --- fabricating synthetic fibers for high oxygen environments
[NASA-CASE-MSC-14331-3] c27 N78-32262
- General purpose rocket furnace
[NASA-CASE-MFS-23460-1] c12 N79-26075
- AEROSPACE MEDICINE**
- Piston device for producing known constant positive pressure within lungs by using thoracic muscles
[NASA-CASE-XMS-01615] c05 N70-41329
- Cooling system for removing metabolic heat from an hermetically sealed spacesuit
[NASA-CASE-ARC-11059-1] c54 N78-32721
- AEROSPACE VEHICLES**
- Aerospace configuration with low and high aspect ratio variability for high and low speed flight
[NASA-CASE-XLA-00142] c02 N70-33286
- Landing pad assembly for aerospace vehicles
[NASA-CASE-IMP-02853] c31 N70-36654
- Aerospace vehicle with variable planform for hypersonic and subsonic flight
[NASA-CASE-XLA-00805] c31 N70-38010
- Development of resilient fastener for attaching skin of aerospace vehicles to permit movement of skin relative to framework
[NASA-CASE-XLA-01027] c31 N71-24035
- Chemical spot tests for identification of titanium and titanium alloys used in aerospace vehicles
[NASA-CASE-LAR-10539-1] c17 N73-12547
- AEROSPACEPLANES**
- Multistage aerospace craft --- perspective drawings of conceptual design
[NASA-CASE-IMP-02263] c05 N74-10907
- AFTERBODIES**
- Afterburner-equipped jet engine nacelle with slotted configuration afterbody
[NASA-CASE-XLA-10450] c28 N71-21493
- AFTERBURNING**
- Exhaust nozzle with afterburning for generating thrust
[NASA-CASE-XLA-00154] c28 N70-33374
- AGING (MATERIALS)**
- Method of heat treating age-hardenable alloys
[NASA-CASE-IMP-01311] c26 N75-29236
- AGRICULTURE**
- Solar-powered pump
[NASA-CASE-NPO-13567-1] c44 N76-29701
- AILERONS**
- Device for controlling rotary potentiometer mounted on aircraft steering wheel or aileron control
[NASA-CASE-XAC-10019] c15 N71-23809
- AIR**
- Gas purged dry box glove reducing permeation of air or moisture into dry box or isolator by diffusion through glove
[NASA-CASE-XLE-02531] c05 N71-23080
- Superconducting magnetic field trapping device for producing magnetic field in air
[NASA-CASE-IMP-01185] c26 N73-28710
- AIR CONDITIONING**
- Automotive absorption air conditioner utilizing solar and motor waste heat
[NASA-CASE-NPO-15183] c44 N80-29843
- Apparatus for supplying conditioned air at a substantially constant temperature and humidity
[NASA-CASE-GSC-12191-1] c31 N80-32583
- AIR CONDITIONING EQUIPMENT**
- Portable apparatus producing high velocity annular air column surrounding low velocity, filtered, superclean air central core for industrial clean room environmental control
[NASA-CASE-IMP-03212] c15 N71-22721
- Air conditioning system and component therefore distributing air flow from opposite directions
[NASA-CASE-GSC-11445-1] c31 N74-27902
- AIR COOLING**
- Modification and improvement of turbine blades for maximum cooling efficiency
[NASA-CASE-XLB-00092] c15 N70-33264
- AIR FILTERS**
- Development of filter apparatus for gas separation and characteristics of filter cell support frame for improved operation
[NASA-CASE-MSC-12297] c14 N72-23457
- AIR FLOW**
- Wind tunnel air flow modulating device and apparatus for selectively generating wave motion in wind tunnel airstream
[NASA-CASE-XLA-00112] c11 N70-33287
- Photographing surface flow patterns on wind tunnel test models
[NASA-CASE-XLA-01353] c14 N70-41366
- Method for maintaining good performance in gas turbine during air flow distortion
[NASA-CASE-LEW-10286-1] c28 N71-28915
- Apparatus and method for generating large mass flow of high temperature air at hypersonic speeds
[NASA-CASE-LAR-10612-1] c12 N73-28144
- Air conditioning system and component therefore distributing air flow from opposite directions
[NASA-CASE-GSC-11445-1] c31 N74-27902
- Controlled separation combustor --- airflow distribution in gas turbine engines
[NASA-CASE-LEW-11593-1] c20 N76-14190
- Method and apparatus for fluffing, separating, and cleaning fibers
[NASA-CASE-LAR-11224-1] c37 N76-18456
- Smoke generator
[NASA-CASE-ARC-10905-1] c37 N77-13418
- Variable cycle gas turbine engines
[NASA-CASE-LEW-12916-1] c37 N78-17384
- Gas turbine engine with recirculating bleed
[NASA-CASE-LEW-12452-1] c07 N78-25089
- AIR INTAKES**
- Aeroflexible wing structure with air scoop for inflating stiffeners with ram air
[NASA-CASE-XLA-06095] c01 N69-39981
- Reversed cowl flap inlet thrust augmentor --- with adjustable airfoil
[NASA-CASE-ARC-10754-1] c07 N75-24736
- Self stabilizing sonic inlet
[NASA-CASE-LEW-11890-1] c05 N79-24976
- Curved centerline air intake for a gas turbine engine
[NASA-CASE-LEW-13201-1] c07 N81-14999
- AIR LOCKS**
- Spacecraft air lock system to provide ingress and egress of astronaut without subjecting vehicular environment to vacuum of space
[NASA-CASE-XLA-02050] c31 N71-22968
- System for removing and repairing spacecraft control thrusters by use of portable air locks
[NASA-CASE-MFS-20325] c28 N71-27095
- Airlock for waste transferal from pressurized enclosure aboard space vehicle to waste receiver at negative pressure
[NASA-CASE-MFS-20922] c31 N72-20840
- Airlock
[NASA-CASE-MFS-20922-1] c18 N74-22136
- Apparatus for inserting and removing specimens from high temperature vacuum furnaces
[NASA-CASE-LAR-10841-1] c31 N74-27900
- AIR NAVIGATION**
- Autonomous navigation system --- gyroscopic pendulum for air navigation
[NASA-CASE-ARC-11257-1] c04 N81-21047
- AIR POLLUTION**
- Analytical photoionization mass spectrometer with argon gas filter between light source and monochromator
[NASA-CASE-LAR-10180-1] c06 N71-13461
- Contamination free separation nut eliminating combustion products from ambient surroundings generated by squib firing
[NASA-CASE-XGS-01971] c15 N71-15922
- Monitoring atmospheric pollutants with a heterodyne radiometer transmitter-receiver
[NASA-CASE-NPO-11919-1] c35 N74-11284
- Fluorescence detector for monitoring atmospheric pollutants
[NASA-CASE-NPO-13231-1] c45 N75-27585
- Stack plume visualization system
[NASA-CASE-LAR-11675-1] c45 N76-17656
- Indicator providing continuous indication of the presence of a specific pollutant in air
[NASA-CASE-NPO-13474-1] c45 N76-21742
- Method for detecting pollutants --- through chemical reactions and heat treatment
[NASA-CASE-LAR-11405-1] c45 N76-31714
- Combustion engine --- for air pollution control
[NASA-CASE-NPO-13671-1] c37 N77-31497

- Coal desulfurization process
[NASA-CASE-NPO-13937-1] c44 N78-31527
- AIR PURIFICATION**
Developing high pressure gas purification and filtration system for use in test operations of space vehicles
[NASA-CASE-MFS-12806] c14 N71-17588
Portable apparatus producing high velocity annular air column surrounding low velocity, filtered, superclean air central core for industrial clean room environmental control
[NASA-CASE-XMF-03212] c15 N71-22721
Cell and method for electrolysis of water and anode
[NASA-CASE-MSC-16394-1] c28 N81-24280
- AIR SAMPLING**
Pressure probe for sensing ambient static air pressures
[NASA-CASE-XLA-00481] c14 N70-36824
Sampler of gas borne particles
[NASA-CASE-NPO-13396-1] c35 N76-18401
Mobile sampler for use in acquiring samples of terrestrial atmospheric gasses
[NASA-CASE-NPO-15220-1] c35 N81-24414
Automated syringe sampler --- remote sampling of air and water
[NASA-CASE-LAR-12308-1] c35 N81-29407
- AIR TRAFFIC CONTROL**
Traffic control system for supersonic transports using synchronous satellite for data relay between vehicles and ground station
[NASA-CASE-GSC-10087-1] c02 N71-19287
Satellite aided aircraft collision avoidance system effective for large number of aircraft
[NASA-CASE-ERC-10090] c21 N71-24948
System and method for position locating for air traffic control involving supersonic transports
[NASA-CASE-GSC-10087-3] c07 N72-12080
- AIRBORNE EQUIPMENT**
Inflatable radar reflector unit - lightweight, highly reflective to electromagnetic radiation, and adaptable for erection and deployment with minimum effort and time
[NASA-CASE-XMS-00893] c07 N70-40063
- AIRBORNE/SPACEBORNE COMPUTERS**
Logic circuit to ripple add and subtract binary counters for spaceborne computers
[NASA-CASE-XGS-04766] c08 N71-18602
Shared memory for a fault-tolerant computer
[NASA-CASE-NPO-13139-1] c60 N76-21914
- AIRCRAFT**
Pilot warning indicator system of intruder aircraft
[NASA-CASE-ERC-10226-1] c14 N73-16483
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[NASA-CASE-NPO-13886-1] c32 N78-24391
- AIRCRAFT ACCIDENTS**
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[NASA-CASE-ERC-10090] c21 N71-24948
- AIRCRAFT COMPARTMENTS**
Low density bismaleimide-carbon microballoon composites --- aircraft and submarine compartment safety
[NASA-CASE-ARC-11040-2] c24 N78-27184
- AIRCRAFT CONFIGURATIONS**
Variable sweep wing configuration for supersonic aircraft
[NASA-CASE-XLA-00230] c02 N70-33255
Television simulation for aircraft and space flight
[NASA-CASE-XPR-03107] c09 N71-19449
Design of dual fuselage aircraft with pivoting wing and horizontal stabilizer to permit yawing of wing in flight for high speed operation
[NASA-CASE-ARC-10470-1] c02 N73-26005
- AIRCRAFT CONTROL**
Development and characteristics of control system for flexible wings
[NASA-CASE-XLA-06958] c02 N71-11038
Development of attitude control system for vertical takeoff aircraft using reaction nozzles displaced from various axes of aircraft
[NASA-CASE-XAC-08972] c02 N71-20570
Device for controlling rotary potentiometer mounted on aircraft steering wheel or aileron control
[NASA-CASE-XAC-10019] c15 N71-23809
- Direct lift control system having flaps with slots adjacent to their leading edge and particularly adapted for lightweight aircraft
[NASA-CASE-LAR-10249-1] c02 N71-26110
Supersonic or hypersonic vehicle control system comprising elevons with hinge line sweep and free of adverse aerodynamic cross coupling
[NASA-CASE-XLA-08967] c02 N71-27088
Development of aircraft control system with high performance electrically controlled and mechanically operated hydraulic valves for precise flight operation
[NASA-CASE-XAC-00048] c02 N71-29128
Development of thrust control system for application to control of aircraft and spacecraft
[NASA-CASE-MSC-13397-1] c21 N72-25595
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[NASA-CASE-ERC-10439] c02 N73-19004
Situational display system of cathode ray tubes to assist pilot in aircraft control
[NASA-CASE-ERC-10350] c14 N73-20474
Development of aerodynamic control system to control flutter over large range of oscillatory frequencies using stability augmentation techniques
[NASA-CASE-LAR-10682-1] c02 N73-26004
Integrated lift/drag controller for aircraft
[NASA-CASE-ARC-10456-1] c05 N75-12930
High lift aircraft --- with improved stability, control, performance, and noise characteristics
[NASA-CASE-LAR-11252-1] c05 N75-25914
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[NASA-CASE-LAR-12215-1] c08 N79-23097
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[NASA-CASE-LAR-12268-1] c08 N81-24106
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[NASA-CASE-LAR-12562-1] c08 N81-26152
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[NASA-CASE-LAR-12136-1] c08 N81-33210
- AIRCRAFT DESIGN**
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[NASA-CASE-XLA-04451] c02 N71-12243
Design of dual fuselage aircraft with pivoting wing and horizontal stabilizer to permit yawing of wing in flight for high speed operation
[NASA-CASE-ARC-10470-1] c02 N73-26005
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[NASA-CASE-XMF-02263] c05 N74-10907
High lift aircraft --- with improved stability, control, performance, and noise characteristics
[NASA-CASE-LAR-11252-1] c05 N75-25914
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[NASA-CASE-LAR-11932-1] c05 N78-32086
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[NASA-CASE-ERC-10412-1] c09 N73-12211
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[NASA-CASE-LAR-12275-1] c35 N79-18296
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[NASA-CASE-LAR-11141-1] c07 N74-32418
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[NASA-CASE-LAR-11310-1] c07 N77-28118
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[NASA-CASE-FRC-10113-1] c33 N80-26599
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- AIRCRAFT EQUIPMENT**
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turbulence along flight path
[NASA-CASE-ERC-10081] c14 N72-28437

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AIRCRAFT FUEL SYSTEMS
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AIRCRAFT GUIDANCE
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[NASA-CASE-LBW-11187-1] c28 N73-19793

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[NASA-CASE-XLA-00487] c14 N70-40157

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[NASA-CASE-LAR-11695-2] c37 N80-18402

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[NASA-CASE-NPO-10714] c06 N69-31244
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[NASA-CASE-IMP-08656] c06 N71-11242
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[NASA-CASE-IGS-04119] c18 N69-39979
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[NASA-CASE-XLE-01997] c06 N71-23527
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[NASA-CASE-LEW-13171-1] c44 N81-22466
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[NASA-CASE-XMS-06061] c05 N71-23317
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[NASA-CASE-XNP-06505] c10 N71-24799
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[NASA-CASE-NFS-10068] c10 N71-25139
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[NASA-CASE-GSC-11126-1] c09 N72-25253
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[NASA-CASE-GSC-12595-1] c33 N81-12331
Solar cell system having alternating current
output
[NASA-CASE-LEW-12806-2] c44 N81-12542
Power factor control system for ac induction
motors
[NASA-CASE-NFS-23988-1] c33 N81-27395

ALTIMETERS
Echo tracker/range finder for radars and sonars
[NASA-CASE-NPO-14361-1] c32 N79-26253

ALTITUDE
Combined optical attitude and altitude
indicating instrument for use in aircraft or
spacecraft
[NASA-CASE-XLA-01907] c14 N71-23268
A system for providing an integrated display of
instantaneous information relative to aircraft
attitude, heading, altitude, and horizontal
situation
[NASA-CASE-PRC-11005-1] c06 N79-24988

ALTITUDE CONTROL
Ambient atmospheric pressure sensing device for
determining altitude of flight vehicles
[NASA-CASE-XLA-06128] c15 N70-37525

ALUMINUM
Joining aluminum to stainless steel by bonding
aluminum coatings onto titanium coated
stainless steel and brazing aluminum to
aluminum/titanium coated steel
[NASA-CASE-NFS-07369] c15 N71-20443
Low concentration alkaline solution treatment of
aluminum with metal phosphate surface coatings
to improve chemical bonding and reduce coating
weight
[NASA-CASE-XLA-01995] c18 N71-23047
Etching aluminum alloys with aqueous solution
containing sulfuric acid, hydrofluoric acid,
and an alkali metal dischromate for adhesive
bonding
[NASA-CASE-XMP-02303] c17 N71-23828
Process for producing dispersion strengthened
nickel with aluminum comprising metallic
matrices embedded with oxides or other
hyperfine compounds

[NASA-CASE-XLB-06969] c17 N71-24142
Nickel plating onto etched aluminum castings
[NASA-CASE-XNP-04148] c17 N71-24830
Method of plating copper on aluminum to permit
conventional soldering of structural aluminum
bodies
[NASA-CASE-XLA-08966-1] c17 N71-25903
Heat activated emf cells with aluminum anode
[NASA-CASE-LEW-11359] c03 N71-28579
Heat activated cell with aluminum anode
[NASA-CASE-LEW-11359-2] c03 N72-20034
Method of preparing graphite reinforced aluminum
composite
[NASA-CASE-NFS-21077-1] c24 N75-28135
Method of fluxless brazing and diffusion bonding
of aluminum containing components
[NASA-CASE-MSC-14435-1] c37 N76-18455
Method for making an aluminum or copper
substrate panel for selective absorption of
solar energy
[NASA-CASE-NFS-23518-1] c44 N79-11469
Recovery of aluminum from composite propellants
[NASA-CASE-NPO-14110-1] c28 N81-15119

ALUMINUM ALLOYS
High strength aluminum casting alloy for
cryogenic applications in aerospace engineering
[NASA-CASE-XMP-02786] c17 N71-20743
Etching aluminum alloys with aqueous solution
containing sulfuric acid, hydrofluoric acid,
and an alkali metal dischromate for adhesive
bonding
[NASA-CASE-XMP-02303] c17 N71-23828
Method of producing complex aluminum alloy parts
of high temper, and products thereof
[NASA-CASE-MSC-19693-1] c26 N78-24333
Nickel ternary alloy having improved cyclic
oxidation resistance
[NASA-CASE-LEW-13339-1] c26 N81-12211

ALUMINUM COATINGS
Intermetallic chromium containing nickel
aluminide for high temperature corrosion
protection of stainless steels
[NASA-CASE-LEW-11267-1] c17 N73-32414
Preparing oxidizer coated metal fuel particles
[NASA-CASE-NPO-11975-1] c28 N74-33209
Method of protecting the surface of a substrate
--- by applying aluminide coating
[NASA-CASE-LEW-11696-1] c37 N75-13261
Duplex aluminized coatings
[NASA-CASE-LEW-11696-2] c26 N75-19408
Meteoroid impact position locator aid for manned
space station
[NASA-CASE-LAR-10629-1] c35 N75-33367
A silicon-slurry/aluminide coating --- protects
aircraft and land-based gas turbine engines
[NASA-CASE-LEW-13343-1] c24 N80-26389

ALUMINUM OXIDES
Bonding of sapphire to sapphire by eutectic
mixture of aluminum oxide and zirconium oxide
[NASA-CASE-GSC-11577-1] c37 N75-15992
Bonding of sapphire to sapphire by eutectic
mixture of aluminum oxide and zirconium oxide
[NASA-CASE-GSC-11577-3] c24 N79-25143

ALUMINUM SILICATES
White paint production by heating impure
aluminum silicate clay having low solar
absorbance
[NASA-CASE-XNP-02139] c18 N71-24184

AMIDES
Preparation of heterocyclic block copolymer
omega-diamidoximes
[NASA-CASE-ARC-11060-1] c27 N79-22300
Preparation of perfluorinated imidoylamidoximes
--- for eventual preparation of heat and
chemical resistant polymers
[NASA-CASE-ARC-11267-1] c23 N80-26386
Preparation of perfluorinated 1,2,4-oxadiazoles
--- heat and chemical resistant polymers
[NASA-CASE-ARC-11267-2] c25 N80-26407
Method for preparing addition type polyimide
prepregs
[NASA-CASE-LAR-12054-2] c27 N81-14078

AMINES
Direct synthesis of polymeric schiff bases from
two amines and two aldehydes
[NASA-CASE-XNP-08655] c06 N71-11239
Synthesis of schiff bases for heat shields by
acetal anine reactions
[NASA-CASE-XNP-08652] c06 N71-11243

- Polyimide foam for the thermal insulation and fire protection
[NASA-CASE-ARC-10464-1] c27 N74-12812
- Automated analysis of oxidative metabolites
[NASA-CASE-ARC-10469-1] c25 N75-12086
- AMINO ACIDS**
Amino acid analysis
[NASA-CASE-NPO-12130-1] c25 N75-14844
- AMMONIA**
Solid state chemical source for ammonia beam masers
[NASA-CASE-XGS-01504] c16 N70-41578
- AMMONIUM NITRATES**
High performance ammonium nitrate propellant
[NASA-CASE-NPO-14260-1] c28 N79-28342
- AMMONIUM PERCHLORATES**
Ammonium perchlorate composite propellant with organic Cu/II/ chelate catalytic additive
[NASA-CASE-LAR-10173-1] c27 N71-14C90
- Process for the leaching of AP from propellant
[NASA-CASE-NPO-14109-1] c28 N80-23471
- AMPLIFICATION**
Automatic measuring and recording of gain and zero drift characteristics of electronic amplifier
[NASA-CASE-XMS-05562-1] c09 N69-39986
- Clamped amplifier circuit for horizon scanner enabling amplification and accurate measurement of specified parameters
[NASA-CASE-XGS-01784] c10 N71-20782
- Diversity receiving system with diversity phase lock
[NASA-CASE-XGS-01222] c10 N71-20841
- Design of active RC network capable of operating at high Q values with reduced sensitivity to gain amplification and number of passive components
[NASA-CASE-ARC-10042-2] c10 N72-11256
- Amplifying circuit with constant current source for accumulator load and high gain voltage amplification
[NASA-CASE-NPO-11023] c09 N72-17155
- Independent gain and bandwidth control of a traveling wave maser
[NASA-CASE-NPO-13801-1] c36 N78-18410
- Pseudonoise code tracking loop
[NASA-CASE-MSC-18035-1] c32 N81-15179
- AMPLIFIER DESIGN**
Automatic gain control amplifier system
[NASA-CASE-XMS-05307] c09 N69-24330
- Bio-isolated dc operational amplifier --- for bioelectric measurements
[NASA-CASE-ARC-10596-1] c33 N74-21851
- High stability amplifier
[NASA-CASE-GSC-12646-1] c33 N81-32391
- AMPLIFIERS**
Development of stable electronic amplifier adaptable for monolithic and thin film construction
[NASA-CASE-XGS-02812] c09 N71-19466
- Bar oximeter for monitoring blood oxygenation and pressure, pulse rate, and pressure pulse curve, using dc and ac amplifiers
[NASA-CASE-XAC-05422] c04 N71-23185
- Comb type traveling wave maser amplifier for improved high gain broadband output
[NASA-CASE-NPO-10548] c16 N71-24831
- Vibrophonocardiograph comprising low weight and small volume piezoelectric microphone with amplifier having high input impedance for high sensitivity and low frequency response
[NASA-CASE-XPR-07172] c05 N71-27234
- Digital data handling circuits for pulse amplifiers
[NASA-CASE-XNP-01068] c10 N71-28739
- Active RC filter networks and amplifiers for deep space magnetic field measurement
[NASA-CASE-XAC-05462-2] c10 N72-17171
- Full wave modulator-demodulator amplifier apparatus --- for generating rectified output signal
[NASA-CASE-FRC-10072-1] c33 N74-14939
- Automatic focus control for facsimile cameras
[NASA-CASE-LAR-11213-1] c35 N75-15014
- Reflected-wave maser --- low noise amplifier
[NASA-CASE-NPO-13490-1] c36 N76-31512
- Inductorless narrow-band filter/amplifier
[NASA-CASE-GSC-12410-1] c33 N79-24260
- AMPLITUDE DISTRIBUTION ANALYSIS**
Monitoring system for signal amplitude ranges over predetermined time interval
[NASA-CASE-XMS-04061-1] c09 N69-39885
- Cathode ray oscilloscope for analyzing electrical waveforms representing amplitude distribution of time function
[NASA-CASE-XNP-01383] c09 N71-10659
- Analog to digital converter circuit for pulse height analysis
[NASA-CASE-XNP-00477] c08 N73-28045
- AMPLITUDE MODULATION**
Alternating current signal generator providing plurality of amplitude modulated output signals
[NASA-CASE-XNP-05612] c09 N69-21468
- Development of demodulation system for removing amplitude modulation from two quadrature displaced data bearing signals
[NASA-CASE-XAC-04030] c10 N71-19472
- Development of apparatus for amplitude modulation of diode laser by periodic discharge of direct current power supply
[NASA-CASE-XMS-04269] c16 N71-22895
- Vibrating element electrometer producing high conversion gain by input current control of elements resonant frequency displacement amplitude
[NASA-CASE-XAC-02807] c09 N71-23021
- Scanning signal phase and amplitude electronic control device with hybrid T waveguide junction
[NASA-CASE-NPO-10302] c10 N71-26142
- High efficiency transformerless amplitude modulator coupled to RF power amplifier
[NASA-CASE-GSC-10668-1] c07 N71-28430
- Gated compressor, distortionless signal limiter
[NASA-CASE-NPO-11820-1] c32 N74-19788
- Amplitude steered array
[NASA-CASE-GSC-11446-1] c33 N74-20860
- Stark-effect modulation of CO₂ laser with NH₂D
[NASA-CASE-NPO-11945-1] c36 N76-18427
- Adaptive reference voltage generator for firing angle control of line-commutated inverters
[NASA-CASE-MFS-25215-1] c33 N81-31481
- AMPLITUDES**
Circuits for amplitude limiting of random noise inputs
[NASA-CASE-NPO-10169] c10 N71-24844
- AMPOULES**
Apparatus and method for heating a material in a transparent ampoule --- crystal growth
[NASA-CASE-MFS-25436-1] c76 N81-30012
- ANALGESIA**
Indomethacin-antihistamine combination for gastric ulceration control
[NASA-CASE-ARC-11118-2] c52 N81-14613
- Indomethacin-antihistamine combination for gastric ulceration control
[NASA-CASE-ARC-11118-1] c52 N81-29764
- ANALOG CIRCUITS**
Electric network for monitoring temperatures, detecting critical temperatures, and indicating critical time duration
[NASA-CASE-XMF-01097] c10 N71-16058
- Automatic closed circuit television arc guidance control for welding joints
[NASA-CASE-MFS-13046] c07 N71-19433
- Electronic divider and multiplier for analog electric signals
[NASA-CASE-XPR-05637] c09 N71-19480
- Continuous Fourier transform method and apparatus --- for the analysis of simultaneous analog signal components
[NASA-CASE-ARC-10466-1] c60 N75-13539
- Electronic analog divider
[NASA-CASE-LEW-11881-1] c33 N77-17354
- ANALOG COMPUTERS**
Analog spatial maneuver computer with three output angles for obtaining desired spatial attitude
[NASA-CASE-GSC-10880-1] c08 N72-11172
- ANALOG DATA**
Data compression processor for monitoring analog signals by sampling procedure
[NASA-CASE-NPO-10068] c08 N71-19288
- Wide range analog data compression system
[NASA-CASE-XGS-02612] c08 N71-19435
- Analog signal to discrete time converter
[NASA-CASE-ERC-10048] c09 N72-25251

- Digital plus analog output encoder
[NASA-CASE-GSC-12115-1] c62 N76-31546
- Velocity measurement system
[NASA-CASE-MFS-23363-1] c35 N78-32396
- ANALOG SIMULATION**
- Apparatus for simulating optical transmission links
[NASA-CASE-GSC-11877-1] c74 N76-18913
- ANALOG TO DIGITAL CONVERTERS**
- Conversion system for increasing resolution of analog to digital converters
[NASA-CASE-XAC-00404] c08 N70-40125
- Analog to digital converter for converting pulses to frequencies
[NASA-CASE-XLA-00670] c08 N71-12501
- Describing continuous analog to digital converter with parallel digital output and nonlinear feedback
[NASA-CASE-XAC-04031] c08 N71-18594
- Voltage drift compensation circuit for analog-to-digital converter
[NASA-CASE-XNP-04780] c08 N71-19687
- Development and characteristics of fluid oscillator analog to digital converter with variable frequency controlled by signal passing through conditioning circuit
[NASA-CASE-LEW-10345-1] c10 N71-25899
- Data acquisition system for converting displayed analog signal to digital values
[NASA-CASE-NPO-10344] c10 N71-26544
- Apparatus for automatically testing analog to digital converters for open and short circuits
[NASA-CASE-XLA-06713] c14 N71-28991
- Wide range analog to digital converter with variable gain amplifier
[NASA-CASE-NPO-11018] c08 N72-21200
- Analog to digital converter using offset voltage to eliminate errors
[NASA-CASE-MSC-13110-1] c08 N72-22163
- Analog to digital converter analyzing system
[NASA-CASE-NPO-10560] c08 N72-22166
- Control and information system for digital telemetry data using analog converter to digitize sensed parameter values
[NASA-CASE-NPO-11016] c08 N72-31226
- Nonrecursive counting digital filter containing shift register
[NASA-CASE-NPO-11821-1] c08 N73-26175
- Analog to digital converter circuit for pulse height analysis
[NASA-CASE-XNP-00477] c08 N73-28045
- Analog to digital converter
[NASA-CASE-NPO-13385-1] c33 N76-18345
- Analog to digital converter for two-dimensional radiant energy array computers
[NASA-CASE-GSC-11839-3] c60 N77-32731
- Electrochemical detection device --- for use in microbiology
[NASA-CASE-LAR-11922-1] c25 N79-24073
- ANALYZERS**
- Mixed liquid and vapor phase analyzer design with thermocouples for relative heat transfer measurement
[NASA-CASE-NPO-10691] c14 N71-26199
- Automated fluid chemical analyzer for microchemical analysis of small quantities of liquids by use of selected reagents and analyzer units
[NASA-CASE-XNP-09451] c06 N71-26754
- Micrometeoroid analyzer using arrays of interconnected capacitors and ion detector
[NASA-CASE-ARC-10443-1] c14 N73-20477
- NDIR gas analyzer based on absorption modulation ratios for known and unknown samples
[NASA-CASE-ARC-10802-1] c35 N75-30502
- Cosmic dust analyzer
[NASA-CASE-MSC-13802-2] c35 N76-15431
- Optically selective, acoustically resonant gas detecting transducer
[NASA-CASE-ARC-10639-1] c35 N78-13400
- ANEMOMETERS**
- Anemometer with braking mechanism to prevent rotation of wind driven elements
[NASA-CASE-XNP-05224] c14 N71-23726
- Maxoneters for measuring peak wind speeds during severe environmental conditions
[NASA-CASE-MFS-20916] c14 N73-25460
- ANGIOGRAPHY**
- Contour detector and data acquisition system for the left ventricular outline
[NASA-CASE-ARC-10985-1] c52 N79-10724
- ANGLE OF ATTACK**
- Angle detector
[NASA-CASE-ARC-11036-1] c35 N78-32395
- Aerodynamic side-force alleviator means
[NASA-CASE-LAR-12326-1] c02 N81-14968
- ANGLES (GEOMETRY)**
- Gage for measuring internal angle of flare on end of tube
[NASA-CASE-XMF-04415] c14 N71-24693
- Optical device containing rotatable prism and reflecting mirror for generating precise angles
[NASA-CASE-XGS-04173] c19 N71-26674
- Rotating raster generator
[NASA-CASE-PBC-10071-1] c32 N74-20813
- ANGULAR ACCELERATION**
- Strain gage accelerometer for angular acceleration measurement
[NASA-CASE-XMS-05936] c14 N70-41682
- ANGULAR CORRELATION**
- Device for determining relative angular position of spacecraft and radiating celestial body
[NASA-CASE-GSC-11444-1] c14 N73-28490
- ANGULAR DISTRIBUTION**
- Noncontacting method for measuring angular deflection
[NASA-CASE-LAR-12178-1] c74 N80-21138
- ANGULAR MOMENTUM**
- Stretch Yo-Yo mechanism for reducing initial spin rate of space vehicle
[NASA-CASE-XGS-00619] c30 N70-40016
- Rim inertial measuring system
[NASA-CASE-LAR-12052-1] c18 N81-29152
- ANGULAR RESOLUTION**
- Characteristics and performance of electrical system to determine angular rotation
[NASA-CASE-XMF-00447] c14 N70-33179
- ANGULAR VELOCITY**
- Describing angular position and velocity sensing apparatus
[NASA-CASE-XGS-05680] c14 N71-17585
- Interferometric angle monitor
[NASA-CASE-GSC-12614-1] c35 N81-12386
- Speed control device for a heavy duty shaft --- solar sails for spacecraft propulsion
[NASA-CASE-NPO-14170-1] c37 N81-15364
- ANHYDRIDES**
- Perfluoro alkylene dioxy-bis-(4-phthalic anhydrides and oxy-bis-(perfluoroalkyleneoxyphthalic anhydrides
[NASA-CASE-MFS-22356-1] c23 N75-30256
- Catalysts for polyimide foams from aromatic isocyanates and aromatic dianhydrides --- flame retardant foams
[NASA-CASE-ARC-11107-1] c25 N80-16116
- Prepolymer dianhydrides
[NASA-CASE-NPO-13899-1] c27 N80-32515
- ANILINE**
- Synthesis of high purity dianilinosilanes
[NASA-CASE-XNP-06409] c06 N71-23230
- ANIMALS**
- Automatic real-time pair-feeding system for animals
[NASA-CASE-ARC-10302-1] c51 N74-15778
- Tread drum for animals --- having an electrical shock station
[NASA-CASE-ARC-10917-1] c51 N78-27733
- ANISOTROPIC MEDIA**
- Hybrid composite laminate structures
[NASA-CASE-LEW-12118-1] c24 N77-27188
- ANNEALING**
- Recovering efficiency of solar cells damaged by environmental radiation through thermal annealing
[NASA-CASE-XGS-04047-2] c03 N72-11062
- CDS solid state phase insensitive ultrasonic transducer --- annealing cadmium sulfide crystals
[NASA-CASE-LAR-12304-1] c35 N80-20559
- ANNULAR NOZZLES**
- Large area-ratio nozzles for rocket motor thrust chambers
[NASA-CASE-XLE-00145] c28 N70-36806
- Electrostatic microthrust propulsion system with annular slit colloid thruster
[NASA-CASE-GSC-10709-1] c28 N71-25213

ANNULAR PLATES

- Bluff-shaped annular configuration for
supersonic decelerator for reentry vehicles
[NASA-CASE-XLE-00222] c02 N70-37939
Multiple plate hydrostatic viscous damper
[NASA-CASE-LEW-12445-1] c37 N81-22360

ANODES

- Design and characteristics of heat activated
electric cell with anode made from one or more
alkali metals and cathode made from oxidizing
material
[NASA-CASE-LEW-11358] c03 N71-26084
Storage battery comprising negative plates of a
wedge shaped configuration --- for preventing
shape change induced malfunctions
[NASA-CASE-NPO-11806-1] c44 N74-19693
Resistive anode image converter
[NASA-CASE-HQN-10876-1] c33 N76-27473
Rechargeable battery which combats shape change
of the zinc anode
[NASA-CASE-HQN-10862-1] c44 N76-29699
Arc control in compact arc lamps
[NASA-CASE-NPO-10870-1] c33 N77-22386
Multiple anode arc lamp system
[NASA-CASE-NPO-10857-1] c33 N80-14330

ANODIC COATINGS

- Anodizing method for providing metal surfaces
with temperature reducing coatings against
flames
[NASA-CASE-XLE-00035] c33 N71-29151
Anode for ion thruster
[NASA-CASE-LEW-12048-1] c20 N77-20162

ANTENNA ARRAYS

- Monopole antenna system for maximum
omnidirectional efficiency for use on satellites
[NASA-CASE-XLA-00414] c07 N70-38200
Radio receiver with array of independently
steerable antennas for deep space communication
[NASA-CASE-XLA-00901] c07 N71-10775
Characteristics of antenna horn feeds consisting
of central horn with overlapping peripheral
horns
[NASA-CASE-GSC-10452] c07 N71-12396
Tracking antenna system with array for
synchronous satellite or ground based radar
[NASA-CASE-GSC-10553-1] c07 N71-19854
Interferometric tuning acquisition and tracking
radar antenna system
[NASA-CASE-XMS-09610] c07 N71-24625
Development of electronic circuit for combining
input signals on two separate antennas to form
two processed signals
[NASA-CASE-MSC-12205-1] c07 N71-27056
Antenna array at focal plane of reflector with
coupling network for beam switching
[NASA-CASE-GSC-10220-1] c07 N71-27233
Pattern and impedance matching improvements in
transversely polarized triaxial antenna
[NASA-CASE-XGS-02290] c07 N71-28809
Planar array circularly polarized antenna with
wall slot excitation
[NASA-CASE-NPO-10301] c07 N72-11148
Vertically stacked collinear array of
independently fed omnidirectional antennas for
use in collision warning systems on commercial
aircraft
[NASA-CASE-LAR-10545-1] c09 N72-21244
Circularly polarized antenna with linearly
polarized pair of elements
[NASA-CASE-ERC-10214] c09 N72-31235
Development of phase control coupling for use
with phased array antenna
[NASA-CASE-ERC-10285] c10 N73-16206
Plural beam antenna with parabolic reflectors
[NASA-CASE-GSC-11013-1] c09 N73-19234
Amplitude steered array
[NASA-CASE-GSC-11046-1] c33 N74-20860
Position determination systems --- using orbital
antenna scan of celestial bodies
[NASA-CASE-MSC-12593-1] c17 N76-21250
Thin conformal antenna array for microwave power
conversions
[NASA-CASE-NPO-13886-1] c32 N78-24391
RF beam center location method and apparatus for
power transmission system
[NASA-CASE-NPO-13821-1] c44 N78-28594
Phased array antenna control
[NASA-CASE-MSC-14939-1] c32 N79-11264

- Phase conjugation method and apparatus for an
active retrodirective antenna array
[NASA-CASE-NPO-13641-1] c32 N79-24210
Scannable beam forming interferometer antenna
array system
[NASA-CASE-GSC-12365-1] c32 N80-28578
Frequency translating phase conjugation circuit
for active retrodirective antenna array ---
microwave transmission
[NASA-CASE-NPO-14536-1] c32 N81-14185
Coaxial phased array antenna
[NASA-CASE-MSC-16800-1] c32 N81-14187
Baseband signal combiner for large aperture
antenna array
[NASA-CASE-NPO-14641-1] c32 N81-29308

ANTENNA COMPONENTS

- Digital servo controller --- for rotating
antenna shaft
[NASA-CASE-KSC-10769-1] c33 N74-29556
Paraday rotation measurement method and apparatus
--- to receive RF signals from spacecraft
which exhibits polarization characteristics
due to spin stabilization
[NASA-CASE-NPO-14839-1] c35 N80-16313

ANTENNA COUPLERS

- Dual band combiner for horn antenna
[NASA-CASE-NPO-14519-1] c32 N80-23524

ANTENNA DESIGN

- Development and characteristics of low-noise
multinode monopulse antenna feed system for
use with microwave communication equipment
[NASA-CASE-XNP-01735] c07 N71-22750
Nose cone mounted heat resistant antenna
comprising plurality of adjacent layers of
silica not introducing paths of high thermal
conductivity through ablative shield
[NASA-CASE-XMS-04312] c07 N71-22984
Development of electronic circuit for combining
input signals on two separate antennas to form
two processed signals
[NASA-CASE-MSC-12205-1] c07 N71-27056
Development and characteristics of extensible
dipole antenna using deformable tubular
metallic strip element
[NASA-CASE-HQN-00937] c07 N71-28979
Development of method for suppressing excitation
of electromagnetic surface waves on dielectric
converter antenna
[NASA-CASE-XLA-10772] c07 N71-28980
Target acquisition antenna feed with reflector
system
[NASA-CASE-GSC-10064-1] c10 N72-22235
Collapsible high gain antenna which can be
automatically expanded to operating state
[NASA-CASE-KSC-10392] c07 N73-26117
Dish antenna having switchable beamwidth ---
with truncated concave ellipsoid subreflector
[NASA-CASE-GSC-11760-1] c33 N75-19516
Horn antenna having V-shaped corrugated slots
[NASA-CASE-LAR-11112-1] c32 N76-15330
Highly efficient antenna system using a
corrugated horn and scanning hyperbolic
reflector
[NASA-CASE-NPO-13568-1] c32 N76-21365
Furlable antenna --- antenna design
[NASA-CASE-NPO-13553-1] c33 N76-32457
Collapsible corrugated horn antenna
[NASA-CASE-LAR-11745-1] c32 N80-29539
Complementary cross-slot phased array antenna
[NASA-CASE-MSC-18532-1] c32 N80-29543
Multiple band circularly polarized microstrip
antenna
[NASA-CASE-MSC-18334-1] c32 N80-32604

ANTENNA FEEDS

- Design and operation of multi-feed cone
Cassegrain antenna
[NASA-CASE-NPO-10539] c07 N71-11285
Characteristics of antenna horn feeds consisting
of central horn with overlapping peripheral
horns
[NASA-CASE-GSC-10452] c07 N71-12396
Target acquisition antenna feed with reflector
system
[NASA-CASE-GSC-10064-1] c10 N72-22235
Multinode antenna feed system for microwave and
broadband communication
[NASA-CASE-GSC-11046-1] c07 N73-28013
Low loss dichroic plate
[NASA-CASE-NPO-13171-1] c32 N74-11000

- High efficiency multifrequency feed
[NASA-CASE-GSC-11909] c32 N74-20863
- Single frequency, two feed dish antenna having switchable beamwidth
[NASA-CASE-GSC-11968-1] c32 N76-15329
- Reflex feed system for dual frequency antenna with frequency cutoff means
[NASA-CASE-NPO-14022-1] c32 N78-31321
- Antenna feed system for receiving circular polarization and transmitting linear polarization
[NASA-CASE-NPO-14362-1] c32 N80-16261
- Multifrequency broadband polarized horn antenna
[NASA-CASE-NPO-14588-1] c32 N81-25278
- Unequal split microwave power divider
[NASA-CASE-LAR-12889-1] c33 N81-31483
- ANTENNA RADIATION PATTERNS**
- Broadband chokes and absorbers to reduce spurious radiation patterns of antenna array caused by support structures
[NASA-CASE-XMS-05303] c07 N69-27462
- Multiple mode horn antenna with radiation pattern of equal beamwidths and suppressed sidelobes
[NASA-CASE-XNP-01057] c07 N71-15907
- Monopulse scanning network for scanning volumetric antenna pattern
[NASA-CASE-GSC-10299-1] c09 N71-24804
- High impact antennas with high radiating efficiency
[NASA-CASE-NPO-10231] c07 N71-26101
- Pattern and impedance matching improvements in transversely polarized triaxial antenna
[NASA-CASE-XGS-02290] c07 N71-28809
- System for locating lightning strokes by coordination of directional antenna signals
[NASA-CASE-KSC-10729-1] c09 N73-32110
- Highly efficient antenna system using a corrugated horn and scanning hyperbolic reflector
[NASA-CASE-NPO-13568-1] c32 N76-21365
- Coaxial phased array antenna
[NASA-CASE-MSC-16800-1] c32 N81-14187
- ANTENNAS**
- Antenna design with self erecting mesh reflector
[NASA-CASE-XGS-09190] c31 N71-16102
- High impact antennas with high radiating efficiency
[NASA-CASE-NPO-10231] c07 N71-26101
- Collapsible antenna boom and coaxial transmission line having inflatable inner tube
[NASA-CASE-MFS-20068] c07 N71-27191
- Conical reflector antenna with feed approximating line source
[NASA-CASE-NPO-10303] c07 N72-22127
- Antenna grout replacement system
[NASA-CASE-NPO-15205-1] c37 N81-19457
- ANTIBIOTICS**
- Determination of antimicrobial susceptibilities on infected urines without isolation
[NASA-CASE-GSC-12046-1] c52 N79-14750
- ANTIFRICTION BEARINGS**
- Development of hybrid bearing lubrication system with combination of standard type lubrication and magnetic flux field for earth atmosphere and space environment operation
[NASA-CASE-XNP-01641] c15 N71-22997
- Development of rolling element bearing for operation in ultrahigh vacuum environment
[NASA-CASE-XLE-09527-2] c15 N71-26189
- Fatigue life of hybrid antifriction bearings at ultrahigh speeds
[NASA-CASE-LEW-11152-1] c15 N73-32359
- Hollow high strength rolling elements for antifriction bearings fabricated from preformed components
[NASA-CASE-LEW-11026-1] c15 N73-33383
- Method of making bearing materials --- self-lubricating, oxidation resistant composites for high temperature applications
[NASA-CASE-LEW-11930-4] c24 N75-17516
- Method of making bearing material
[NASA-CASE-LEW-11930-3] c24 N80-33482
- ANTIGRAVITY**
- Anti-gravity device
[NASA-CASE-MFS-22758-1] c70 N75-26789
- ANTIHISTAMINICS**
- Indomethacin-antihistamine combination for gastric ulceration control
[NASA-CASE-ARC-11118-2] c52 N81-14613
- Indomethacin-antihistamine combination for gastric ulceration control
[NASA-CASE-ARC-11118-1] c52 N81-29764
- ANTIREFLECTION COATINGS**
- Silicon nitride coated, plastic covered solar cell
[NASA-CASE-LEW-11496-1] c44 N77-14580
- ANVILS**
- Exponential horn, copper plate, magnetic hammer, and anvil in apparatus for making diamonds
[NASA-CASE-MFS-20698] c15 N72-20446
- APERTURES**
- Apertured electrode focusing system for ion sources with nonuniform plasma density
[NASA-CASE-XNP-03332] c09 N71-10618
- Threadless fastener apparatus comprising receiving apertures for plurality of articles, self-locked condition, and capable of using nonmalleable materials in both ends
[NASA-CASE-XPR-05302] c15 N71-23254
- Apparatus for on-film optical recording of camera lens aperture and focus setting
[NASA-CASE-MSC-12363-1] c14 N73-26431
- Method of forming aperture plate for electron microscope
[NASA-CASE-ARC-10448-2] c74 N75-12732
- Method of making an apertured casting --- using duplicate mold
[NASA-CASE-LEW-11169-1] c37 N76-23570
- Electron microscope aperture system
[NASA-CASE-ARC-10448-3] c35 N77-14408
- Clutter free synthetic aperture radar correlator
[NASA-CASE-NFO-14035-1] c32 N78-18266
- APOLLO PROJECT**
- Intra- and extravehicular life support space suite for Apollo astronauts
[NASA-CASE-MSC-12609-1] c05 N73-32012
- APOLLO SPACECRAFT**
- Low onset rate energy absorber in form of strut assembly for crew couch of Apollo command module
[NASA-CASE-MSC-12279-1] c15 N70-35679
- Energy absorbing crew couch strut for Apollo command module
[NASA-CASE-MSC-12279] c15 N72-17450
- APPLICATIONS OF MATHEMATICS**
- Apparatus for computing square roots
[NASA-CASE-XGS-04768] c08 N71-19437
- APPROACH INDICATORS**
- Spectrally balanced chromatic landing approach lighting system
[NASA-CASE-ARC-10990-1] c04 N77-12031
- AQUEOUS SOLUTIONS**
- Anti-fog composition --- for prevention of fogging on surfaces such as space helmet visors and windshields
[NASA-CASE-MSC-13530-2] c23 N75-14834
- Automated system for identifying traces of organic chemical compounds in aqueous solutions
[NASA-CASE-NPO-13063-1] c25 N76-18245
- Electrophotolysis oxidation system for measurement of organic concentration in water
[NASA-CASE-MSC-16497-1] c25 N79-23167
- Method for separating biological cells --- suspended in aqueous polymer systems
[NASA-CASE-MFS-23883-1] c51 N80-16715
- Method of forming dynamic membrane on stainless steel support
[NASA-CASE-MSC-18172-1] c26 N80-19237
- Method of cross-linking polyvinyl alcohol and other water soluble resins
[NASA-CASE-LEW-13103-1] c27 N80-32516
- ARC DISCHARGES**
- Development of device to prevent high voltage arcing in electron beam welding
[NASA-CASE-XNP-08522] c15 N71-19486
- Direct current powered self repeating plasma accelerator with interconnected annular and linear discharge channels
[NASA-CASE-XLA-03103] c25 N71-21693
- Method and apparatus for nondestructive testing --- using high frequency arc discharges
[NASA-CASE-MFS-21233-1] c38 N74-15395
- Sustained arc ignition system
[NASA-CASE-LEW-12444-1] c33 N77-28385
- ARC HEATING**
- Magnetically diffused radial electric arc heater
[NASA-CASE-XLA-00330] c33 N70-34540
- Electric arc device for minimizing electrode ablation and heating gases to supersonic or

- hypersonic wind tunnel temperatures
[NASA-CASE-IAC-00319] c25 N70-41628
- Annular arc accelerator shock tube
[NASA-CASE-NPO-13528-1] c09 N77-10071
- ARC JET ENGINES**
Improving performance of magnetoplasmadynamic arc rocket engine
[NASA-CASE-LEW-11180-1] c25 N73-25760
- ARC LAMPS**
Starting circuit design for initiating and maintaining arcs in vapor lamps
[NASA-CASE-XNP-01058] c09 N71-12540
- Compact, high intensity arc lamp with internal magnetic field producing means
[NASA-CASE-NPO-11510-1] c33 N77-21315
- Depressurization of arc lamps
[NASA-CASE-NPO-10790-1] c33 N77-21316
- Arc control in compact arc lamps
[NASA-CASE-NPO-10870-1] c33 N77-22386
- Purging means and method for Xenon arc lamps
[NASA-CASE-NPO-11978] c31 N78-17238
- Multiple anode arc lamp system
[NASA-CASE-NPO-10857-1] c33 N80-14330
- ARC WELDING**
Emission spectroscopy method for contamination monitoring of inert gas metal arc welding
[NASA-CASE-XMP-02039] c15 N71-15871
- Automatic closed circuit television arc guidance control for welding joints
[NASA-CASE-MPS-13046] c07 N71-19433
- Development of device to prevent high voltage arcing in electron beam welding
[NASA-CASE-XMP-08522] c15 N71-19486
- Development of apparatus for automatically changing carriage speed of welding machine to obtain constant speed of torch along work surface
[NASA-CASE-XMP-07069] c15 N71-23815
- Grain refinement control in TIG arc welding
[NASA-CASE-MSC-19095-1] c37 N75-19683
- ARCHITECTURE**
Development of construction block in form of container folded from flat sheet and filled with solid material for architectural purposes
[NASA-CASE-MSC-12233-2] c32 N73-13921
- ARCHITECTURE (COMPUTERS)**
Massively parallel processor computer
[NASA-CASE-GSC-12223-1] c60 N79-27864
- ARM (ANATOMY)**
Apparatus for applying simulator g-forces to an arm of an aircraft simulator pilot
[NASA-CASE-LAR-10550-1] c09 N74-30597
- Orthotic arm joint --- for use in mechanical arms
[NASA-CASE-MPS-21611-1] c54 N75-12616
- Controller arm for a remotely related slave arm
[NASA-CASE-ARC-11052-1] c37 N79-28551
- ARMATURES**
Design and development of electric motor with stationary field and armature windings which operates on direct current
[NASA-CASE-XGS-05290] c09 N71-25999
- Solenoid valve including guide for armature and valve member
[NASA-CASE-GSC-10607-1] c15 N72-20442
- Direct current motor including stationary field windings and stationary armature winding
[NASA-CASE-XGS-07805] c15 N72-33476
- Natural turbulence electrical power generator --- using wave action or random motion
[NASA-CASE-LAR-11551-1] c44 N80-29834
- Linear magnetic bearings --- active magnetic suspension of armatures
[NASA-CASE-GSC-12582-1] c37 N81-16469
- AROMATIC COMPOUNDS**
Ultraviolet and thermally stable polymer compositions
[NASA-CASE-ARC-10592-1] c27 N74-21156
- Ultraviolet and thermally stable polymer compositions
[NASA-CASE-ARC-10592-2] c27 N76-32315
- Synthesis of multifunction triaryltrifluoroethanes
[NASA-CASE-ARC-11097-1] c23 N78-22154
- Synthesis of multifunction triaryltrifluoroethanes
[NASA-CASE-ARC-11097-2] c23 N78-22155
- Polymeric foams from cross-linkable poly-n-arylenebenzimidazoles
[NASA-CASE-ARC-11008-1] c27 N78-31232
- Process for preparing thermoplastic aromatic polyimides
[NASA-CASE-LAR-11828-1] c27 N78-32261
- Curing agent for polyepoxides and epoxy resins and composites cured therewith --- preventing carbon fiber release
[NASA-CASE-LEW-13226-1] c27 N81-17260
- ARRAYS**
Radio frequency arraying method for receivers
[NASA-CASE-NPO-14328-1] c32 N80-18253
- Pyroelectric detector arrays
[NASA-CASE-LAR-12363-1] c35 N81-12389
- BATTERIES**
Arterial pulse wave pressure transducer
[NASA-CASE-GSC-11531-1] c52 N74-27566
- ARTIFICIAL CLOUDS**
Chemical system for releasing barium to create ion clouds in upper atmosphere and interplanetary space
[NASA-CASE-LAR-10670-1] c06 N73-30097
- ARTIFICIAL GRAVITY**
Artificial gravity system for simulating self-locomotion capability of astronauts in rotating environments
[NASA-CASE-XLA-03127] c11 N71-10776
- Development of method for producing artificial gravity in manned spacecraft
[NASA-CASE-XNP-02595] c31 N71-21881
- Spacecraft with artificial gravity and earthlike atmosphere
[NASA-CASE-LEW-11101-1] c31 N73-32750
- ARTIFICIAL INTELLIGENCE**
Tactile sensing system --- manipulator controllers
[NASA-CASE-NPO-15094-1] c33 N81-16386
- ARTIFICIAL SATELLITES**
Gravity gradient attitude control system with gravity gradiometer and reaction wheels for artificial satellite attitude control
[NASA-CASE-GSC-10555-1] c21 N71-27324
- ASBESTOS**
Reconstituted asbestos matrix --- for use in fuel or electrolysis cells
[NASA-CASE-MSC-12568-1] c24 N76-14204
- ASPECT RATIO**
Variable aspect ratio and variable sweep delta wing planforms for supersonic aircraft
[NASA-CASE-XLA-00221] c02 N70-33266
- Supersonic aircraft configuration providing for variable aspect ratio and variable sweep wings
[NASA-CASE-XLA-00166] c02 N70-34178
- Supersonic aircraft variable sweep wing planform for varying aspect ratio
[NASA-CASE-XLA-00350] c02 N70-38011
- ASPHALT**
Thermoplastic rubber comprising ethylene-vinyl acetate copolymer, asphalt and fluxing oil
[NASA-CASE-NPO-08835-1] c27 N78-33228
- ASSAYING**
Rapid, quantitative determination of bacteria in water
[NASA-CASE-GSC-12158-1] c51 N78-22585
- ASSEMBLIES**
Multiple Belleville spring assembly with even load distribution
[NASA-CASE-XNP-00840] c15 N70-38225
- Bearing seat usable in a gas turbine engine
[NASA-CASE-LEW-12477-1] c37 N77-32501
- Foldable beam
[NASA-CASE-LAR-12077-1] c31 N81-25259
- ASTRONAUT LOCOMOTION**
Artificial gravity system for simulating self-locomotion capability of astronauts in rotating environments
[NASA-CASE-XLA-03127] c11 N71-10776
- Space suit with pressure-volume compensator system
[NASA-CASE-XLA-05332] c05 N71-11194
- Equipotential space suits utilizing mechanical aids to minimize astronaut energy at bending joints
[NASA-CASE-LAR-10007-1] c05 N71-11195
- Space suit using nonflexible material with low leakage and providing protection against thermal extremes, physical punctures, and radiation with high mobility articulation
[NASA-CASE-XAC-07043] c05 N71-23161
- Development of improved convolute section for pressurized suits to provide high degree of mobility in response to minimum of applied torque
[NASA-CASE-XMS-09637-1] c05 N71-24730

- Gravity environment simulation by locomotion and restraint aid for studying manual operation performance of astronauts at zero gravity
[NASA-CASE-ARC-10153] c05 N71-28619
- Walking boot assembly
[NASA-CASE-ARC-11101-1] c54 N78-17675
- Spacesuit mobility knee joints
[NASA-CASE-ARC-11058-2] c54 N79-24651
- ASTRONAUT MANEUVERING EQUIPMENT**
- Hand-held maneuvering unit for propulsion and attitude control of astronauts in zero or reduced gravity environment
[NASA-CASE-XMS-05304] c05 N71-12336
- Space environmental work simulator with portions of space suit mounted to vacuum chamber wall
[NASA-CASE-XMP-07488] c11 N71-18773
- Lightweight propulsion unit for movement of personnel and equipment across lunar surface
[NASA-CASE-MFS-20130] c28 N71-27585
- ASTRONAUT PERFORMANCE**
- Gravity environment simulation by locomotion and restraint aid for studying manual operation performance of astronauts at zero gravity
[NASA-CASE-ARC-10153] c05 N71-28619
- Spacesuit mobility joints
[NASA-CASE-ARC-11058-1] c54 N78-31735
- ASTRONAUT TRAINING**
- Attitude control training device for astronauts permitting friction-free movement with five degrees of freedom
[NASA-CASE-XMS-02977] c11 N71-10746
- Low and zero gravity simulator for astronaut training
[NASA-CASE-MFS-10555] c11 N71-19494
- Apparatus for training astronaut crews to perform on simulated lunar surface under conditions of lunar gravity
[NASA-CASE-XMS-04798] c11 N71-21474
- ASTRONAUTS**
- Three transceiver lunar emergency system to relay voice communication of astronaut
[NASA-CASE-MFS-21042] c07 N72-25171
- Manual actuator --- for spacecraft exercising machines
[NASA-CASE-MFS-21481-1] c37 N74-18127
- ASTRONAVIGATION**
- Guidance analyzer having suspended spacecraft simulating sphere for astronavigation
[NASA-CASE-XNP-09572] c14 N71-15621
- ASTRONOMICAL PHOTOGRAPHY**
- Cameras for photographing meteors in selected sky area
[NASA-CASE-LAR-10226-1] c14 N73-19419
- ASTRONOMICAL TELESCOPES**
- Light sensitive control system for automatically opening and closing dome of solar optical telescope
[NASA-CASE-MSC-10966] c14 N71-19568
- Laser beam projector for continuous, precise alignment between target, laser generator, and astronomical telescope during tracking
[NASA-CASE-NPO-11087] c23 N71-29125
- Star image motion compensator using telescope for maintaining fixed images
[NASA-CASE-LAR-10523-1] c14 N72-22444
- Anastigmatic three-mirror telescope
[NASA-CASE-MFS-23675-1] c89 N79-10969
- ASYMMETRY**
- Asymmetric polyimide separation membrane and method
[NASA-CASE-NPO-15431-1] c25 N81-29178
- ATMOSPHERIC COMPOSITION**
- Design and development of two types of atmosphere sampling chambers
[NASA-CASE-NPO-11373] c13 N72-25323
- Development and operation of apparatus for sampling particulates in gases in upper atmosphere
[NASA-CASE-HQN-10037-1] c14 N73-27376
- Monitoring atmospheric pollutants with a heterodyne radiometer transmitter-receiver
[NASA-CASE-NPO-11919-1] c35 N74-11284
- Microwave limb sounder --- to measure trace gases in the upper atmosphere
[NASA-CASE-NPO-14544-1] c74 N79-34014
- Chelate-modified polymers for atmospheric gas chromatography
[NASA-CASE-ARC-11154-1] c25 N80-23383
- Mobile sampler for use in acquiring samples of terrestrial atmospheric gasses
[NASA-CASE-NPO-15220-1] c35 N81-24414
- ATMOSPHERIC ENTRY**
- Designing spacecraft for flight into space, atmospheric reentry, and landing at selected sites
[NASA-CASE-XAC-02058] c02 N71-16087
- Development of method for measuring electron density gradients of plasma sheath around space vehicle during atmospheric entry
[NASA-CASE-XLA-06232] c25 N71-20563
- Orbital and entry tracking accessory for globes --- to provide range requirements for reentry vehicles to any landing site
[NASA-CASE-LAR-10626-1] c19 N74-21015
- ATMOSPHERIC ENTRY SIMULATION**
- Crossed-field plasma accelerator for laboratory simulation of atmospheric reentry conditions
[NASA-CASE-XLA-00675] c25 N70-33267
- Wind tunnel method for simulating flow fields around blunt vehicles entering planetary atmospheres without involving high temperatures
[NASA-CASE-LAR-11138] c12 N71-20436
- ATMOSPHERIC PHYSICS**
- Development and characteristics of apparatus for measuring intensity of electric field in atmosphere
[NASA-CASE-KSC-10730-1] c14 N73-32318
- ATMOSPHERIC PRESSURE**
- Method of purifying metallurgical grade silicon employing reduced pressure atmospheric control
[NASA-CASE-NPO-14474-1] c26 N80-14229
- ATMOSPHERIC RADIATION**
- Radiometric measuring system for solar activity and atmospheric attenuation and emission
[NASA-CASE-ERC-10276] c14 N73-26432
- ATMOSPHERIC REFRACTION**
- Geodetic distance measuring apparatus
[NASA-CASE-GSC-12609-1] c36 N81-22344
- ATMOSPHERIC SCATTERING**
- Clear air turbulence detector
[NASA-CASE-MFS-21244-1] c36 N75-15028
- ATMOSPHERIC TURBULENCE**
- Passive optical wind and turbulence remote detection system
[NASA-CASE-XMP-14032] c20 N71-16340
- Focused laser Doppler velocimeter
[NASA-CASE-MFS-23178-1] c35 N77-10493
- ATOMIZERS**
- Portable cryogenic cooling system design including turbine pump, cooling chamber, and atomizer
[NASA-CASE-NPO-10467] c23 N71-26654
- ATS**
- Doppler frequency shift correction device for multiplex communication with Applications Technology Satellites
[NASA-CASE-XGS-02749] c07 N69-39978
- ATTACHMENT**
- Silicon carbide backward diode with coated lead attachment
[NASA-CASE-ERC-10224-2] c09 N73-27150
- ATTENUATORS**
- Rotary vane attenuator with two stators and intermediary rotor, using resistive and orthogonally disposed cards
[NASA-CASE-NPO-11418-1] c14 N73-13420
- Pulse transducer with artifact signal attenuator --- heart rate sensors
[NASA-CASE-FRC-11012-1] c52 N80-23969
- ATTITUDE (INCLINATION)**
- Analog spatial maneuver computer with three output angles for obtaining desired spatial attitude
[NASA-CASE-GSC-10880-1] c08 N72-11172
- Spacecraft attitude sensing system design with narrow field of view sensor rotating about spacecraft x-y axis
[NASA-CASE-GSC-10890-1] c21 N73-30640
- Interferometer mirror tilt correcting system
[NASA-CASE-NPO-13687-1] c35 N78-18391
- ATTITUDE CONTROL**
- Visual target luminaires for retrofire attitude control
[NASA-CASE-XMS-12158-1] c31 N69-27499
- Unitary three-axis controller for flight vehicles within or outside atmosphere
[NASA-CASE-XPR-00181] c21 N70-33279

- Sensing method and device for determining orientation of space vehicle or satellite by using particle traps
[NASA-CASE-XGS-00466] c21 N70-34297
- Attitude and propellant flow control system for liquid propellant rocket vehicles
[NASA-CASE-XNP-00185] c21 N70-34539
- Spacecraft attitude control system using solar and earth sensors, gyroscopes, and jet actuators
[NASA-CASE-XNP-00465] c21 N70-35395
- Attitude control device for space vehicles
[NASA-CASE-XNP-00294] c21 N70-36938
- Attitude orientation control of spin stabilized final stage space vehicles, using horizon scanners
[NASA-CASE-XLA-00281] c21 N70-36543
- Automatic ejection valve for attitude control and midcourse guidance of space vehicles
[NASA-CASE-XNP-00676] c15 N70-38996
- Three-axis controller operated by hand-wrist motion for yaw, pitch, and roll control
[NASA-CASE-XAC-01404] c05 N70-41581
- Attitude control training device for astronauts permitting friction-free movement with five degrees of freedom
[NASA-CASE-XMS-02977] c11 N71-10746
- Photomultiplier detector of Canopus for spacecraft attitude control
[NASA-CASE-XNP-03914] c21 N71-10771
- Automatic balancing device for use on frictionless supported attitude-controlled test platforms
[NASA-CASE-LAR-10774] c10 N71-13545
- Development of spacecraft experiment pointing and attitude control system
[NASA-CASE-XLA-05464] c21 N71-14132
- Development of attitude control system for spacecraft orientation
[NASA-CASE-XGS-04393] c21 N71-14159
- System for aerodynamic control of rocket vehicles by secondary injection of fluid into nozzle exhaust stream
[NASA-CASE-XLA-01163] c21 N71-15582
- Drive mechanism for operating reactance attitude control system for aerospace bodies
[NASA-CASE-XNP-01598] c21 N71-15583
- Attitude detection system using stellar references for three-axis control and spin stabilized spacecraft
[NASA-CASE-XGS-03431] c21 N71-15642
- Remote control device operated by movement of finger tips for manual control of spacecraft attitude
[NASA-CASE-XAC-02405] c09 N71-16489
- Thrust and attitude control apparatus using jet nozzle in movable canard surface or fin configuration
[NASA-CASE-XLE-03583] c31 N71-17629
- Attitude sensor with scanning mirrors for detecting orientation of space vehicle with respect to planet
[NASA-CASE-XLA-00793] c21 N71-22880
- Development of attitude control system for sounding rocket stabilization during ballistic phase of flight
[NASA-CASE-XGS-01654] c31 N71-24750
- Development of voice operated controller for controlling reaction jets of spacecraft
[NASA-CASE-XLA-04063] c31 N71-33160
- Attitude sensor
[NASA-CASE-LAR-10586-1] c19 N74-15089
- Temperature compensated digital inertial sensor --- circuit for maintaining inertial element of gyroscope or accelerometer at constant position
[NASA-CASE-NPO-13044-1] c35 N74-15094
- Sun direction detection system
[NASA-CASE-NPO-13722-1] c74 N77-22951
- Thrust augmented spin recovery device
[NASA-CASE-LAR-11970-2] c08 N81-19130
- ATTITUDE GYRO**
Spacecraft attitude control system using solar and earth sensors, gyroscopes, and jet actuators
[NASA-CASE-XNP-00465] c21 N70-35395
- Attitude control system
[NASA-CASE-NPS-22787-1] c15 N77-10113
- ATTITUDE INDICATORS**
Photosensitive light source device for detecting unmanned spacecraft deviation from reference attitude
[NASA-CASE-XNP-00438] c21 N70-35089
- Hand controller operable about three respectively perpendicular axes and capable of actuating signal generators for attitude control devices
[NASA-CASE-XMS-07487] c15 N71-23255
- Combined optical attitude and altitude indicating instrument for use in aircraft or spacecraft
[NASA-CASE-XLA-01907] c14 N71-23268
- Aircraft horizon and vertical indicator
[NASA-CASE-ERC-10392] c21 N73-14692
- Attitude sensor
[NASA-CASE-LAR-10586-1] c19 N74-15089
- Translatory shock absorber for attitude sensors
[NASA-CASE-NPS-22905-1] c19 N76-22284
- Air speed and attitude probe
[NASA-CASE-FRC-11009-1] c06 N80-18036
- Aircraft body-axis rotation measurement system
[NASA-CASE-FRC-11043-1] c06 N81-22048
- ATTITUDE STABILITY**
Dynamic precession damping of spin-stabilized vehicles by using rate gyroscope and angular accelerometer
[NASA-CASE-XLA-01989] c21 N70-34295
- Attitude stabilizer for nonguided missile or vehicle with respect to trajectory
[NASA-CASE-ARC-10134] c30 N72-17873
- Method of and apparatus for damping nutation motion with minimum spin axis attitude disturbance
[NASA-CASE-GSC-12551-1] c18 N81-12156
- AUDIO EQUIPMENT**
Audio equipment for removing impulse noise from audio signals
[NASA-CASE-NPO-11631] c10 N73-12244
- AUDIO FREQUENCIES**
High efficiency transformerless amplitude modulator coupled to RF power amplifier
[NASA-CASE-GSC-10668-1] c07 N71-28430
- Audio frequency analysis circuit for determining, displaying, and recording frequency of sweeping audio frequency signal
[NASA-CASE-NPO-11147] c14 N72-27408
- AUDITORY DEFECTS**
Hearing aid malfunction detection system
[NASA-CASE-MSC-14916-1] c33 N78-10375
- AUDITORY PERCEPTION**
Auditory display for the blind
[NASA-CASE-HQN-10832-1] c71 N74-21014
- AUDITORY SIGNALS**
Audio signal processing system for noise surge elimination at low amplitude audio input
[NASA-CASE-MSC-12223-1] c07 N71-26181
- Audio equipment for removing impulse noise from audio signals
[NASA-CASE-NPO-11631] c10 N73-12244
- AUDITORY STIMULI**
Auditory display for the blind
[NASA-CASE-HQN-10832-1] c71 N74-21014
- AUGER EFFECT**
Apparatus for accurately preloading auger attachment means for frangible protective material
[NASA-CASE-MSC-18791-1] c37 N81-24446
- AUSTENITIC STAINLESS STEELS**
Intermetallic chromium containing nickel aluminide for high temperature corrosion protection of stainless steels
[NASA-CASE-LEW-11267-1] c17 N73-32414
- Device for measuring the ferrite content in an austenitic stainless-steel weld
[NASA-CASE-NPS-22907-1] c26 N76-18257
- AUTOCALVES**
System for sterilizing objects --- cleaning space vehicle systems
[NASA-CASE-KSC-11085-1] c54 N81-24724
- AUTOCORRELATION**
Linear three-tap feedback shift register
[NASA-CASE-NPO-10351] c08 N71-12503
- Circuitry for developing autocorrelation function continuously within signal receiving period
[NASA-CASE-XNP-00746] c07 N71-21476
- An electro-optical Doppler tracker means and method for optical correlation of synthetic aperture radar data
[NASA-CASE-NPO-14998-1] c33 N81-15194

AUTOMATIC CONTROL

Automatic control of voltage supply to direct current motor
[NASA-CASE-XMS-04215-1] c09 N69-39587

Electro-optical/computer system for aligning large structural members and maintaining correct position
[NASA-CASE-XNP-02029] c14 N70-41955

Pulsed energy power system for application of combustible gases to turbine controlling ac voltage generator
[NASA-CASE-MSC-13112] c03 N71-11057

Automatic balancing device for use on frictionless supported attitude-controlled test platforms
[NASA-CASE-LAR-10774] c10 N71-13545

Computer controlled apparatus for maintaining welding torch angle and velocity during seam tracking
[NASA-CASE-XNP-03287] c15 N71-15607

Fluid leakage detection system with automatic monitoring capability
[NASA-CASE-LAR-10323-1] c12 N71-17573

Light sensitive control system for automatically opening and closing dome of solar optical telescope
[NASA-CASE-MSC-10966] c14 N71-19568

Welding torch with automatic speed controller using speed sensing wheel and closed servo system
[NASA-CASE-XNP-01730] c15 N71-23050

Microwave waveguide switch with rotor position control
[NASA-CASE-XNP-06507] c09 N71-23548

Automatically reciprocating, high pressure pump for use in spacecraft cryogenic propellants
[NASA-CASE-XNP-04731] c15 N71-24042

Automatic controlled thermal fatigue testing apparatus
[NASA-CASE-XLA-02059] c33 N71-24276

Automatically charging battery of electric storage cells
[NASA-CASE-XNP-04758] c03 N71-24605

Electric motor control system with pulse width modulation for providing automatic null seeking servo
[NASA-CASE-XNP-05195] c10 N71-24861

Indexing mechanism for cathode array substitution in electron beam tube
[NASA-CASE-NPO-10625] c09 N71-26182

Voltage range selection apparatus for sensing and applying voltages to electronic instruments without loading signal source
[NASA-CASE-XMS-06497] c14 N71-26244

Automated fluid chemical analyzer for microchemical analysis of small quantities of liquids by use of selected reagents and analyzer units
[NASA-CASE-XNP-09451] c06 N71-26754

Automatic control device for regulating inlet water temperature of liquid cooled spacesuit
[NASA-CASE-MSC-13917-1] c05 N72-15098

Optimal control system for automatic speed regulation of electric driven motor vehicle
[NASA-CASE-NPO-11210] c11 N72-20244

Plotter device for automatically drawing equipotential lines on sheet of resistance paper
[NASA-CASE-NPO-11134] c09 N72-21246

Automatic shunting of ion thruster magnetic field when thruster is not operating
[NASA-CASE-LEW-10835-1] c28 N72-22771

Automatic temperature control for liquid cooled space suit
[NASA-CASE-ARC-10599-1] c05 N73-26071

Speed control system for dc motor equipped with brushless Hall effect device
[NASA-CASE-MPS-20207-1] c09 N73-32107

Programmable physiological infusion
[NASA-CASE-ARC-10447-1] c52 N74-22771

Automatically operable self-leveling load table
[NASA-CASE-MPS-22039-1] c09 N75-12968

Automatic focus control for facsimile cameras
[NASA-CASE-LAR-11213-1] c35 N75-15014

Traffic survey system --- using optical scanners
[NASA-CASE-MPS-22631-1] c66 N76-19888

Automatic visual inspection system for microelectronics
[NASA-CASE-NPO-13282] c38 N78-17396

Automatic fluid dispenser
[NASA-CASE-ARC-10820-1] c35 N78-19466

Method for producing solar energy panels by automation
[NASA-CASE-LEW-12541-1] c44 N78-25529

Circuit for automatic load sharing in parallel converter modules
[NASA-CASE-NFO-14056-1] c33 N79-24257

A hydraulic actuator mechanism to control aircraft spoiler movements through dual input commands
[NASA-CASE-LAR-12412-1] c05 N80-11065

Method for forming a solar array strip
[NASA-CASE-NFO-13652-3] c44 N80-14474

Solar energy control system
[NASA-CASE-MPS-25287-1] c44 N80-17544

Automatic thermal switch
[NASA-CASE-GSC-12553-1] c33 N80-21671

Method of growing a ribbon crystal particularly suited for facilitating automated control of ribbon width
[NASA-CASE-NFO-14295-1] c76 N80-32245

Integrated control system for a gas turbine engine
[NASA-CASE-LEW-12594-2] c07 N81-19116

Variable speed drive
[NASA-CASE-GSC-12643-1] c37 N81-24447

Programmable scan/read circuitry for charge coupled device imaging detectors --- for a startracker
[NASA-CASE-NPO-15345-1] c33 N81-27403

AUTOMATIC CONTROL VALVES

Ambient atmospheric pressure sensing device for determining altitude of flight vehicles
[NASA-CASE-XLA-00128] c15 N70-37925

Describing metal valve pintle with encapsulated elastomeric body
[NASA-CASE-MSC-12116-1] c15 N71-17648

Semitoroidal diaphragm cavitating flow control valve
[NASA-CASE-XNP-09704] c12 N71-18615

Reliability of automatic refilling valving device for cryogenic liquid systems
[NASA-CASE-NPO-11177] c15 N72-17453

Combined pressure regulator and shutoff valve
[NASA-CASE-NPO-13201-1] c37 N75-15050

Iodine generator for reclaimed water purification
[NASA-CASE-MSC-14632-1] c54 N78-14784

Automatic compression adjusting mechanism for internal combustion engines
[NASA-CASE-MSC-18807-1] c37 N81-29442

AUTOMATIC FREQUENCY CONTROL

System for phase locking opto carrier frequency signal located within receiver bandpass
[NASA-CASE-XGS-04994] c09 N69-21543

Audio signal processing system for noise surge elimination at low amplitude audio input
[NASA-CASE-MSC-12223-1] c07 N71-26181

Automatic frequency control device for providing frequency reference for voltage controlled oscillator
[NASA-CASE-KSC-10393] c09 N72-21247

Self-tuning electronic filter for maintaining constant bandwidth and center frequency gain
[NASA-CASE-ARC-10264-1] c09 N73-20231

AUTOMATIC GAIN CONTROL

Automatic gain control amplifier system
[NASA-CASE-XMS-05307] c09 N69-24330

Automatic measuring and recording of gain and zero drift characteristics of electronic amplifier
[NASA-CASE-XMS-05562-1] c09 N69-39986

Self-tuning electronic filter for maintaining constant bandwidth and center frequency gain
[NASA-CASE-ARC-10264-1] c09 N73-20231

Digital automatic gain amplifier
[NASA-CASE-KSC-11008-1] c33 N79-22373

Automatic level control circuit
[NASA-CASE-KSC-11170-1] c33 N81-29347

AUTOMATIC TEST EQUIPMENT

Automated visual sensitivity tester for determining visual field sensitivity and blind spot size
[NASA-CASE-ARC-10329-1] c05 N73-26072

Automatic microbial transfer device
[NASA-CASE-LAR-11354-1] c35 N75-27330

Visual examination apparatus
[US-PATENT-BE-28,921] c52 N76-30793

Automated clinical system for chromosome analysis
[NASA-CASE-NFO-13913-1] c52 N79-12694

Automatic flowmeter calibration system
[NASA-CASE-KSC-11076-1] c34 N81-26402

AUTOMATION
Automated multi-level vehicle parking system
[NASA-CASE-NPO-13058-1] c37 N77-22480
Spray coating apparatus having a rotatable
workpiece holder
[NASA-CASE-ARC-11110-1] c37 N78-32434

AUTOMOBILE ENGINES
Automotive gas turbine fuel control
[NASA-CASE-LEW-12785-1] c37 N78-24545
Controller for computer control of brushless dc
motors --- automobile engines
[NASA-CASE-NPO-13970-1] c33 N81-20352

AUTOMOBILE FUELS
Hydrogen rich gas generator
[NASA-CASE-NPO-13342-2] c44 N76-29700

AUTOMOBILES
Fiberglass/epoxy composite automotive door
structure including a glass-reinforced
intrusion strip
[NASA-CASE-NPO-15057-1] c24 N81-19230

AUXILIARY POWER SOURCES
Independent power generator
[NASA-CASE-LAR-11208-1] c44 N78-32539

AXES (REFERENCE LINES)
Test fixture for measuring moment of inertia of
irregularly shaped body with multiple axes
[NASA-CASE-IGS-01023] c14 N71-22992
Mechanism for restraining universal joints to
prevent separation while allowing bending,
ingulation, and lateral offset in any position
about axis
[NASA-CASE-XNP-02278] c15 N71-28951

AXES OF ROTATION
Unitary three-axis controller for flight
vehicles within or outside atmosphere
[NASA-CASE-XPR-00181] c21 N70-33279
Proportional controller for regulating aircraft
or spacecraft motion about three axes
[NASA-CASE-XAC-03392] c03 N70-41954
Electrical and electromechanical trigonometric
computation assembly and space vehicle
guidance system for aligning perpendicular
axes of two sets of three-axes coordinate
references
[NASA-CASE-XNP-00684] c21 N71-21688
Hand controller operable about three
respectively perpendicular axes and capable of
actuating signal generators for attitude
control devices
[NASA-CASE-XMS-07487] c15 N71-23255

AXIAL COMPRESSION LOADS
Development and characteristics of device for
indicating and recording magnitude of force
applied in axial direction
[NASA-CASE-MSC-15626-1] c14 N72-25411
Compression test fixture
[NASA-CASE-MSC-18723-1] c39 N81-24470

AXIAL FLOW TURBINES
Multistage multiple reentry axial flow reaction
turbine with reverse flow reentry ducting
[NASA-CASE-XLE-00170] c15 N70-36412
Multistage, multiple reentry, single rotor,
axial flow turbine
[NASA-CASE-XLE-00085] c28 N70-39895
Method and turbine for extracting kinetic energy
from a stream of two-phase fluid
[NASA-CASE-NPO-14130-1] c34 N79-20335

AXIAL LOADS
Ball locking device which releases in response
to small forces when subjected to high axial
loads
[NASA-CASE-XNP-01371] c15 N70-41829
Method for measuring biaxial stress in a body
subjected to stress inducing loads
[NASA-CASE-MFS-23299-1] c39 N77-28511

AXIAL STRESS
Axially and radially controllable magnetic bearing
[NASA-CASE-GSC-11551-1] c37 N76-18459
Method for measuring biaxial stress in a body
subjected to stress inducing loads
[NASA-CASE-MFS-23299-1] c39 N77-28511

AZIMUTH
Tracking mount for laser telescope employed in
tracking large rockets and space vehicles to
give information regarding azimuth and elevation
[NASA-CASE-MFS-14017] c14 N71-26627

Long range laser traversing system
[NASA-CASE-GSC-11262-1] c36 N74-21091

Magnetic heading reference
[NASA-CASE-LAR-11387-2] c04 N77-19056

Multibeam single frequency synthetic aperture
radar processor for imaging separate range
swaths
[NASA-CASE-NPO-14525-2] c32 N80-32607

AZINES
Synthesis of azine polymers for heat shields by
azine-aromatic aldehyde reaction
[NASA-CASE-XNP-08656] c06 N71-11242
Ultraviolet and thermally stable polymer
compositions
[NASA-CASE-ARC-10592-1] c27 N74-21156
Ultraviolet and thermally stable polymer
compositions
[NASA-CASE-ARC-10592-2] c27 N76-32315
Catalytic trimerization of aromatic nitriles and
triaryl-s-triazine ring cross-linked high
temperature resistant polymers and copolymers
made thereby
[NASA-CASE-LEW-12053-2] c27 N79-28307
Perfluoroalkyl polytriazines containing pendent
iododifluoromethyl groups
[NASA-CASE-ARC-11241-1] c25 N81-14016
Process for the preparation of fluorine
containing crosslinked elastomeric
polytriazine and product so produced
[NASA-CASE-ARC-11248-1] c27 N81-17259

ARO COMPOUNDS
Holding process for imidazopyrrolone polymers
[NASA-CASE-LAR-10547-1] c31 N74-13177

AZOLES
Preparation of perfluorinated 1,2,4-oxadiazoles
--- heat and chemical resistant polymers
[NASA-CASE-ARC-11267-2] c25 N80-26407

B

BACK INJURIES
Spine immobilization apparatus
[NASA-CASE-ARC-11167-1] c52 N81-25662

BACKGROUND NOISE
Electronic background suppression field scanning
sensor for detecting point source targets
[NASA-CASE-IGS-05211] c07 N69-39980

BACKGROUND RADIATION
Method and apparatus for background signal
reduction in opto-acoustic absorption
measurement
[NASA-CASE-NPO-13683-1] c35 N77-14411

BACKSCATTERING
Apparatus for measuring backscatter and
transmission characteristics of sample segment
of large spherical passive satellites
[NASA-CASE-IGS-02608] c07 N70-41678
Mossbauer spectrometer radiation detector
[NASA-CASE-LAR-11155-1] c35 N74-15091

BACKUPS
Flexible backup bar for welding awkwardly shaped
structures
[NASA-CASE-XNP-00722] c15 N70-40204
Reliable electrical element heater using plural
wire system and backup power sources
[NASA-CASE-MFS-21462-1] c33 N74-14935

BACKWARD WAVES
Ladder supported ring bar circuit
[NASA-CASE-LEW-13570-1] c33 N81-24348

BACTERIA
Decontamination of petroleum products with honey
[NASA-CASE-XNP-03835] c06 N71-23499
Portable tester for monitoring bacterial
contamination by adenosine triphosphate light
reaction
[NASA-CASE-GSC-10879-1] c14 N72-25413
Enzymatic luminescent bioassay method for
determining bacterial levels in urine
[NASA-CASE-GSC-11092-2] c04 N73-27052
Lyophilized spore dispenser
[NASA-CASE-LAR-10544-1] c37 N74-13178
Method of detecting and counting bacteria
[NASA-CASE-GSC-11917-2] c51 N76-29891
Rapid, quantitative determination of bacteria in
water
[NASA-CASE-GSC-12158-1] c51 N78-22585
Determination of antimicrobial susceptibilities
on infected urines without isolation
[NASA-CASE-GSC-12046-1] c52 N79-14750

- Method and apparatus for eliminating luminol interference material
[NASA-CASE-MSC-16260-1] c51 N80-16714
- BACTERIOLOGY**
Detection of bacteria in biological fluids and foods
[NASA-CASE-GSC-11533-1] c14 N73-13435
Application of luciferase assay for ATP to antimicrobial drug susceptibility
[NASA-CASE-GSC-12039-1] c51 N77-22794
Automated single-slide staining device
[NASA-CASE-LAR-11649-1] c51 N77-27677
- BAFFLES**
Light radiation direction indicator with baffle of two parallel grids
[NASA-CASE-XNP-03930] c14 N69-24331
Light baffle with oblate hemispheroid surface and shading flange
[NASA-CASE-NPO-10337] c14 N71-15604
Flexible ring slosh damping baffle for spacecraft fuel tank
[NASA-CASE-LAR-10317-1] c32 N71-16103
Submerged fuel tank baffles to prevent sloshing in liquid propellant rocket flight
[NASA-CASE-XLA-04605] c32 N71-16106
Floating baffle for tank drain
[NASA-CASE-KSC-10639] c15 N73-26472
System for the measurement of ultra-low stray light levels --- determining the adequacy of large space telescope systems
[NASA-CASE-MPS-23513-1] c74 N79-11865
- BAGS**
Fecal waste disposal container
[NASA-CASE-XMS-06761] c05 N69-23192
Gas diffusion liquid storage bag and method of use for storing blood
[NASA-CASE-NPO-13930-1] c52 N79-14749
- BAKING**
Bakeable McLeod gauge
[NASA-CASE-XGS-01293-1] c35 N79-33450
- BALANCE**
Thermoprotective device for balances
[NASA-CASE-XAC-00648] c14 N70-40400
Device for monitoring a change in mass in varying gravimetric environments
[NASA-CASE-MFS-21556-1] c35 N74-26945
- BALANCING**
Automatic balancing device for use on frictionless supported attitude-controlled test platforms
[NASA-CASE-LAR-10774] c10 N71-13545
Force balanced throttle valve for fuel control in rocket engines
[NASA-CASE-NPO-10808] c15 N71-27432
Static force balancing system attached to lifting body
[NASA-CASE-LAR-10348-1] c11 N73-12264
- BALL BEARINGS**
Combination guide and rotary bearing for freely moving shaft
[NASA-CASE-XLA-00013] c15 N71-29136
Method for reducing mass of ball bearings for long life operation at high speed
[NASA-CASE-LEW-10856-1] c15 N72-22490
Low mass rolling element bearing assembly
[NASA-CASE-LEW-11087-1] c15 N73-30458
Hollow rolling element bearings
[NASA-CASE-LEW-11087-3] c37 N74-21064
Drilled ball bearing with a one piece anti-tipping cage assembly
[NASA-CASE-LEW-11925-1] c37 N75-31446
Spherical bearing --- to reduce vibration effects
[NASA-CASE-MFS-23447-1] c37 N79-11404
- BALLAST (MASS)**
Inflatable stabilizing system for use on life raft to reduce rocking and preclude capsizing
[NASA-CASE-MSC-12393-1] c02 N73-26606
- BALLASTS (IMPEDANCES)**
Apparatus for ballasting high frequency transistors
[NASA-CASE-XGS-05003] c09 N69-24318
- BALLISTICS**
Fiber modified polyurethane foam for ballistic protection
[NASA-CASE-ARC-10714-1] c27 N76-15310
- BALLOON SOUNDING**
Apparatus for controlling the temperature of balloon-borne equipment
[NASA-CASE-GSC-11620-1] c34 N74-23039
- BALLOONS**
Development and characteristics of hot air balloon deceleration and recovery system
[NASA-CASE-XLA-06824-2] c02 N71-11037
Inflation system for balloon type satellites
[NASA-CASE-XGS-03351] c31 N71-16081
System for controlling torque buildup in suspension of gondola connected to balloon by parachute shroud lines
[NASA-CASE-GSC-11077-1] c02 N73-13008
- BALLS**
Two axis flight controller with potentiometer control shafts directly coupled to rotatable ball members
[NASA-CASE-XFR-04104] c03 N70-42073
Quartz ball valve
[NASA-CASE-NFO-14473-1] c37 N80-23654
- BANDPASS FILTERS**
Helical coaxial resonator RF filter
[NASA-CASE-XGS-02816] c07 N69-24323
Phase locked demodulator with bandwidth switching amplifier circuit
[NASA-CASE-XNP-01107] c10 N71-28859
Signal to noise ratio determination circuit using bandpass limiter
[NASA-CASE-GSC-11239-1] c10 N73-25241
Selective bandpass resonators using bandstop resonator pairs for microwave frequency operation
[NASA-CASE-GSC-10990-1] c09 N73-26195
Dichroic plate --- as bandpass filters
[NASA-CASE-NFO-13506-1] c35 N76-15435
Notch filter
[NASA-CASE-MFS-23303-1] c32 N77-18307
Smoothing filter for digital to analog conversion
[NASA-CASE-FRC-11025-1] c60 N80-17723
Adaptive polarization separation
[NASA-CASE-LAR-12196-1] c33 N81-26358
- BANDWIDTH**
Improvements in receiver of narrow bandwidth television system
[NASA-CASE-XMS-06740-1] c07 N71-26579
Self-tuning electronic filter for maintaining constant bandwidth and center frequency gain
[NASA-CASE-ARC-10264-1] c09 N73-20231
Turnstile and flared cone UHF antenna
[NASA-CASE-LAR-10970-1] c33 N76-14372
Independent gain and bandwidth control of a traveling wave maser
[NASA-CASE-NPO-13801-1] c36 N78-18410
Inductorless narrow-band filter/amplifier
[NASA-CASE-GSC-12410-1] c33 N79-24260
Dual band combiner for horn antenna
[NASA-CASE-NPO-14519-1] c32 N80-23524
- BARIUM**
Chemical system for releasing barium to create ion clouds in upper atmosphere and interplanetary space
[NASA-CASE-LAR-10670-1] c06 N73-30097
- BARIUM COMPOUNDS**
Improved cathode containing barium carbonate block and heated tungsten screen for electron bombardment ion thruster
[NASA-CASE-XLE-07087] c06 N69-39889
- BARIUM FLUORIDES**
Production of barium fluoride-calcium fluoride composite lubricant for bearings or seals
[NASA-CASE-XLE-08511-2] c18 N71-16105
- BARIUM ION CLOUDS**
Rocket having barium release system to create ion clouds in the upper atmosphere
[NASA-CASE-LAR-10670-2] c15 N74-27360
- BARIUM TITANATES**
Memory device employing semiconductor and ferroelectric properties of single crystal barium titanate
[NASA-CASE-EBC-10307] c08 N72-21198
- BARRIER LAYERS**
Schottky barrier solar cell
[NASA-CASE-NPO-13689-2] c44 N81-29525
- BARRIERS**
Short range laser obstacle detector --- for surface vehicles using laser diode array
[NASA-CASE-NPO-11856-1] c36 N74-15145
- BARS**
Satellite retrieval system
[NASA-CASE-MFS-25403-1] c18 N81-24164
- BASES (CHEMICAL)**
Low concentration alkaline solution treatment of

- aluminum with metal phosphate surface coatings to improve chemical bonding and reduce coating weight
[NASA-CASE-XLA-01995] c18 N71-23047
- BASKETS**
Liquid immersion apparatus for minute articles
[NASA-CASE-MFS-25363-1] c31 N80-32585
- BATTERY CHARGERS**
Battery charging system with cell to cell voltage balance
[NASA-CASE-XGS-05432] c03 N71-19438
Alkaline-type coulometer cell for primary charge control in secondary battery recharge circuits
[NASA-CASE-XGS-05434] c03 N71-20491
Development and characteristics of battery charging circuits with coulometer for control of available current
[NASA-CASE-GSC-10487-1] c03 N71-24719
Method and apparatus for conditioning of nickel-cadmium batteries
[NASA-CASE-MFS-23270-1] c44 N78-25531
- BAYARD-ALPERT IONIZATION GAGES**
Describing hot filament type Bayard-Alpert ionization gage with ion collector buried or removed from grid structure
[NASA-CASE-XLA-07424] c14 N71-18482
- BEADS**
Rotary bead dropper and selector for testing micrometeorite transducers
[NASA-CASE-XGS-03304] c09 N71-22588
- BEAM LEADS**
Integrated circuit package with lead structure and method of preparing the same
[NASA-CASE-MFS-21374-1] c33 N74-12951
- BEAM SPLITTERS**
Optical range finder using reflective first surfaces mirror and transmitting beam splitter
[NASA-CASE-MSC-12105-1] c14 N72-21409
Laser extensometer
[NASA-CASE-MFS-19259-1] c36 N78-14380
Over-under double-pass interferometer
[NASA-CASE-NPO-13999-1] c35 N78-18395
Method and apparatus for splitting a beam of energy --- optical communication
[NASA-CASE-GSC-12083-1] c73 N78-32848
Interferometer
[NASA-CASE-NPO-14502-1] c74 N81-17888
Dual-beam skin friction interferometer --- portable equipment
[NASA-CASE-ARC-11354-1] c36 N81-29415
- BEAM SWITCHING**
Using electron beam switching for brushless motor commutation
[NASA-CASE-XGS-01451] c09 N71-10677
Antenna array at focal plane of reflector with coupling network for beam switching
[NASA-CASE-GSC-10220-1] c07 N71-27233
Dish antenna having switchable beamwidth --- with truncated concave ellipsoid subreflector
[NASA-CASE-GSC-11760-1] c33 N75-19516
Single frequency, two feed dish antenna having switchable beamwidth
[NASA-CASE-GSC-11968-1] c32 N76-15329
Switchable beamwidth monopulse method and system
[NASA-CASE-GSC-11924-1] c33 N76-27472
- BEAM WAVEGUIDES**
Laser machining device with dielectric functioning as beam waveguide for mechanical and medical applications
[NASA-CASE-HQN-10541-2] c15 N71-27135
Optical communication system with gas filled waveguide for laser beam transmission
[NASA-CASE-HQN-10541-4] c16 N71-27183
Laser beam projector for continuous, precise alignment between target, laser generator, and astronomical telescope during tracking
[NASA-CASE-NPO-11087] c23 N71-29125
Microwave power transmission beam safety system
[NASA-CASE-NPO-14224-1] c33 N80-18287
Multiprism collimator
[NASA-CASE-GSC-12608-1] c35 N81-12387
- BEAMS (RADIATION)**
Method and means for recording and reconstructing holograms without use of reference beam
[NASA-CASE-BRC-10020] c16 N71-26154
Method and system for transmitting and distributing optical frequency radiation
[NASA-CASE-HQN-10541-3] c23 N72-23695
- Method for shaping and aiming narrow beams --- using a linear frequency chirp for sonar reception
[NASA-CASE-NFO-14632-1] c32 N80-12256
Method and apparatus for Doppler frequency modulation of radiation
[NASA-CASE-NFO-14524-1] c32 N80-24510
Scannable beam forming interferometer antenna array system
[NASA-CASE-GSC-12365-1] c32 N80-28578
Collimated beam manifold and method for using the same --- laser beams
[NASA-CASE-MFS-25312-1] c74 N80-34251
Off-axis coherently pumped laser
[NASA-CASE-GSC-12592-1] c36 N81-12407
Sidelooking laser altimeter for a flight simulator
[NASA-CASE-ARC-11312-1] c36 N81-19439
- BEAMS (SUPPORTS)**
Beam connector apparatus and assembly
[NASA-CASE-MFS-25134-1] c31 N81-12283
Foldable beam
[NASA-CASE-LAR-12077-1] c31 N81-25259
- BEARING (DIRECTION)**
Light radiation direction indicator with baffle of two parallel grids
[NASA-CASE-XNP-03930] c14 N69-24331
Solar radiation direction detector and device for compensating degradation of photocells
[NASA-CASE-XLA-00183] c14 N70-40239
Michelson interferometer with photodetector for optical direction sensing
[NASA-CASE-NPO-10320] c14 N71-17655
Omnidirectional liquid filled accelerometer design with liquid and housing temperature compensation
[NASA-CASE-HQN-10780] c14 N71-30265
Magnetic heading reference
[NASA-CASE-LAR-11387-2] c04 N77-19056
Direction sensitive laser velocimeter --- determining the direction of particles using a helium-neon laser
[NASA-CASE-LAR-12177-1] c36 N81-24422
- BEARINGS**
Metal alloy bearing materials for space applications
[NASA-CASE-XLE-05033] c15 N71-23810
Low friction bearing and lock mechanism for two-axis gimbal carrying satellite payload
[NASA-CASE-GSC-10556-1] c31 N71-26537
Measuring device for bearing preload using spring washers
[NASA-CASE-MFS-20434] c11 N72-25288
Magnetic bearing --- for supplying magnetic fluxes
[NASA-CASE-GSC-11079-1] c37 N75-18574
Magnetic bearing system
[NASA-CASE-GSC-11978-1] c37 N77-17464
Hydrostatic bearing support
[NASA-CASE-LEW-11158-1] c37 N77-28486
Deformable bearing seat
[NASA-CASE-LEW-12527-1] c37 N77-32500
Bearing seat usable in a gas turbine engine
[NASA-CASE-LEW-12477-1] c37 N77-32501
An improved suspension system for a wheel rolling on a flat track --- bearings for directional antennas
[NASA-CASE-NFO-14395-1] c37 N79-12446
Method of making bearing material
[NASA-CASE-LEW-11930-3] c24 N80-33482
Linear magnetic bearings --- active magnetic suspension of armatures
[NASA-CASE-GSC-12582-1] c37 N81-16469
Antenna grout replacement system
[NASA-CASE-NFO-15205-1] c37 N81-19457
Linear magnetic bearing
[NASA-CASE-GSC-12517-1] c33 N81-22279
Unidirectional flexural pivot
[NASA-CASE-GSC-12622-1] c37 N81-22359
- BEDS (PROCESS ENGINEERING)**
Catalyst bed element removing tool
[NASA-CASE-XPR-00811] c15 N70-36901
- BEER LAW**
Multichannel photoionization chamber for measuring absorption, photoionization yield, and coefficients of gases
[NASA-CASE-BRC-10044-1] c14 N71-27090
- BEES**
Decontamination of petroleum products with honey
[NASA-CASE-XNP-03835] c06 N71-23499

BELLOWS

Compact bellows spirometer for high speed and high altitude space travel
[NASA-CASE-XAR-01547] c05 N69-21473
Electrical connection for printed circuits on common board, using bellows principle in rivet.
[NASA-CASE-XNP-05082] c15 N70-41960
Flexible bellows joint shielding sleeve for propellant transfer pipelines
[NASA-CASE-XNP-01855] c15 N71-28937
Internally supported flexible duct joint --- device for conducting fluids in high pressure systems
[NASA-CASE-MFS-19193-1] c37 N75-19686

BELTS

Apparatus for forming drive belts
[NASA-CASE-NPO-13205-1] c31 N74-32917

BENDING

Method and apparatus for bowing of instrument panels to improve radio frequency shielded enclosure
[NASA-CASE-XMP-09422] c07 N71-19436
Development of systems for automatically and continually suppressing or attenuating bending motion in elastic bodies
[NASA-CASE-XAC-05632] c32 N71-23971
Elbow forming in jacketed pipes while maintaining separation between core shape and jacket pipes
[NASA-CASE-XNP-10475] c15 N71-24679
Device for bending metal ribbon or wire
[NASA-CASE-XLA-05966] c15 N72-12408

BENDING DIAGRAMS

Charged particle analyzer with periodically varying voltage applied across electrostatic deflection members
[NASA-CASE-XAC-05506-1] c24 N71-16095

BENDING FATIGUE

Apparatus for testing metallic and nonmetallic beams or rods by bending at high temperatures in vacuum or inert atmosphere
[NASA-CASE-XLE-01300] c15 N70-41993
Cryostat for flexure fatigue testing of composite materials
[NASA-CASE-XMP-02964] c14 N71-17659

BENDING MOMENTS

Launch pad missile release system with bending moment change rate reduction in thrust distribution structure at liftoff
[NASA-CASE-XMP-03198] c30 N70-40353

BENDING VIBRATION

Mercury filled pendulum damper for controlling bending vibration induced by wind effects
[NASA-CASE-LAR-10274-1] c14 N71-17626

BENZENE

Para-benzoquinone dioxide and concentrated mineral acid processed to yield intumescent or fire resistant, heat insulating materials
[NASA-CASE-ARC-10304-1] c18 N73-26572

BERYLLIUM ALLOYS

Development of fluoride coating to prevent oxidation of beryllium surfaces at elevated temperatures
[NASA-CASE-LEW-10327] c17 N71-33408

BERYLLIUM HYDRIDES

Inhibited solid propellant composition containing beryllium hydride
[NASA-CASE-NPO-10866-1] c28 N79-14228

BERYLLIUM OXIDES

High temperature beryllium oxide capacitor
[NASA-CASE-LEW-11938-1] c33 N76-15373

BIAS

Electrical self-aligning connector
[NASA-CASE-MFS-25211-1] c33 N80-32651

BIMETALS

Nonmagnetic thermal motor for magnetometer movement
[NASA-CASE-XAR-03786] c09 N69-21313
Design and development of linear actuator based on bimetallic spring expansion
[NASA-CASE-NPO-10637] c15 N72-12409
Application of spiral, bimetallic strip to create circular motion on mechanical shaft by changing strip temperature
[NASA-CASE-NPO-11283] c09 N72-25260
Development of thermal compensating structure which maintains uniform length with changes in temperature
[NASA-CASE-MFS-20433] c15 N72-28496

Bimetallic fluid displacement apparatus --- for stirring and heating stored gases and liquids
[NASA-CASE-ARC-10441-1] c35 N74-15126
Thermocouples of tantalum and rhenium alloys for more stable vacuum-high temperature performance
[NASA-CASE-LEW-12050-1] c35 N77-32454

BINARY CODES

Time division relay synchronizer with master sync pulse for activating binary counter to produce signal identifying time slot for station
[NASA-CASE-GSC-10373-1] c07 N71-19773
Logic circuit for generating multibit binary code word in parallel
[NASA-CASE-XNP-04623] c10 N71-26103
Design and development of encoder/decoder system to generate binary code which is function of outputs of plurality of bistable elements
[NASA-CASE-NPO-10342] c10 N71-33407
Binary coded sequential acquisition ranging system for distance measurements
[NASA-CASE-NPO-11194] c08 N72-25209
Binary concatenated coding system
[NASA-CASE-MSC-14082-1] c60 N76-23850
Multiple rate digital command detection system with range clean-up capability
[NASA-CASE-NPO-13753-1] c32 N77-20289
Pseudo noise code and data transmission method and apparatus
[NASA-CASE-GSC-12017-1] c32 N77-30308
Binary to binary coded decimal converter
[NASA-CASE-GSC-12044-1] c60 N78-17691
Apparatus and method for stabilized phase detection for binary signal tracking loops
[NASA-CASE-MSC-16461-1] c33 N79-11313

BINARY DATA

Nondestructive interrogating and state changing circuit for binary magnetic storage elements
[NASA-CASE-XGS-00174] c08 N70-34743
Logic circuit to ripple add and subtract binary counters for spaceborne computers
[NASA-CASE-XGS-04766] c08 N71-18602
Describing circuit for obtaining sum of squares of numbers
[NASA-CASE-XGS-04765] c08 N71-18693
Digital synchronizer for extracting binary data in receiver of PSK/PCM communication system
[NASA-CASE-NPO-10851] c07 N71-24613
Differential phase shift keyed communication system
[NASA-CASE-MSC-14065-1] c32 N74-26654
Modulator for tone and binary signals --- phase of modulation of tone and binary signals on carrier waves in communication systems
[NASA-CASE-GSC-11743-1] c32 N75-24981
Binary to binary coded decimal converter
[NASA-CASE-GSC-12044-1] c60 N78-17691

BINARY DIGITS

Logarithmic converter for compressing 19-digit binary input number to 8-digit output
[NASA-CASE-XLA-00471] c08 N70-34778
Circuit diagram and operation of full binary adder
[NASA-CASE-XGS-00689] c08 N70-34787
Binary number sorter for arranging numbers in order of magnitude
[NASA-CASE-NPO-10112] c08 N71-12502
Binary sequence detector with few memory elements and minimized logic circuit complexity
[NASA-CASE-XNP-05415] c08 N71-12505
Cathode ray tube system for displaying ones and zeros in binary wave train
[NASA-CASE-XGS-04987] c08 N71-20571
Characteristics of comparator circuits for comparison of binary numbers in information processing system
[NASA-CASE-XNP-04819] c08 N71-23295
Digital converter for scaling binary number to binary coded decimal number of higher multiple
[NASA-CASE-KSC-10595] c08 N73-12176
Family of n-ary linear feedback shift register with binary logic
[NASA-CASE-NPO-11868] c10 N73-20254
Binary concatenated coding system
[NASA-CASE-MSC-14082-1] c60 N76-23850

BINARY FLUIDS

Flow measuring apparatus
[NASA-CASE-LEW-12078-1] c35 N75-30503

BINARY TO DECIMAL CONVERTERS

Binary to binary-coded decimal converter using single set of logic circuits notwithstanding

- number of shift register decades
[NASA-CASE-IMP-00432] c08 N70-35423
- Design and operation of high speed binary to decimal conversion system
[NASA-CASE-XGS-01230] c08 N71-19544
- Binary to decimal decoder logic circuit design with feedback control and display device
[NASA-CASE-IKS-06167] c08 N71-24690
- High speed direct binary to binary coded decimal converter for use in PCM telemetry systems
[NASA-CASE-KSC-10326] c08 N72-21197
- Binary to binary coded decimal converter
[NASA-CASE-GSC-12044-1] c60 N78-17691
- BINDERS (MATERIALS)**
- Bonded solid lubricant coatings of calcium fluoride and binder for high temperature stability
[NASA-CASE-XMS-00259] c18 N70-36400
- Brazing alloy binder
[NASA-CASE-IMP-05868] c26 N75-27125
- Alkali-metal silicate binders and methods of manufacture
[NASA-CASE-GSC-12303-1] c24 N79-31347
- BINOCULARS**
- Binocular device for displaying numerical information in field of view
[NASA-CASE-LAR-11782-1] c74 N77-20882
- BIOASSAY**
- Spectrophotofluorometer with 3-dimensional display to identify fluorescence spectra of carcinogenic and noncarcinogenic hydrocarbons
[NASA-CASE-XGS-01231] c14 N70-41676
- Bioassay of flavin coenzymes
[NASA-CASE-GSC-10565-1] c06 N72-25149
- Enzymatic luminescent bioassay method for determining bacterial levels in urine
[NASA-CASE-GSC-11092-2] c04 N73-27052
- Amino acid analysis
[NASA-CASE-NPO-12130-1] c25 N75-14844
- Servo-controlled intravital microscope system
[NASA-CASE-NPO-13214-1] c35 N75-25123
- Method of detecting and counting bacteria
[NASA-CASE-GSC-11917-2] c51 N76-29691
- Automated clinical system for chromosome analysis
[NASA-CASE-NPO-13913-1] c52 N79-12694
- Determination of antimicrobial susceptibilities on infected urines without isolation
[NASA-CASE-GSC-12046-1] c52 N79-14750
- Method and apparatus for eliminating luminol interference material
[NASA-CASE-MSC-16260-1] c51 N80-16714
- BIODYNAMICS**
- Prosthesis coupling
[NASA-CASE-KSC-11069-1] c52 N79-26772
- Kinesimetric method and apparatus
[NASA-CASE-MSC-18929-1] c54 N81-15699
- BIOELECTRIC POTENTIAL**
- Electrochemically reversible silver-silver chloride electrode for detecting bioelectric potential differences generated by human muscles and organs
[NASA-CASE-XMS-02872] c05 N69-21925
- Manufacturing process for making perspiration resistant-stress resistant biopotential electrode
[NASA-CASE-MSC-90153-2] c05 N72-25120
- Process for control of cell division
[NASA-CASE-LAR-10773-3] c51 N77-25769
- BIOELECTRICITY**
- Development and characteristics of electrodes in which poisoning by organic molecules is prevented by ion selective electrolytic deposition of hydrophilic protein colloid
[NASA-CASE-XMS-04213-1] c09 N71-26002
- Indirect microbial detection
[NASA-CASE-LAR-12520-1] c51 N81-28698
- BIOENGINEERING**
- Bio-isolated dc operational amplifier --- for bioelectric measurements
[NASA-CASE-ARC-10556-1] c33 N74-21851
- Actuator device for artificial leg
[NASA-CASE-MPS-23225-1] c52 N77-14735
- Percutaneous connector device
[NASA-CASE-KSC-10849-1] c52 N77-14738
- Prosthesis coupling
[NASA-CASE-KSC-11069-1] c52 N79-26772
- Subcutaneous electrode structure
[NASA-CASE-ARC-11117-1] c52 N81-14612
- Urine collection device
[NASA-CASE-MSC-16433-1] c52 N81-24711
- Biomedical flow sensor --- intravenous procedures
[NASA-CASE-MSC-18761-1] c52 N81-24717
- Low X-ray absorption aneurism clips
[NASA-CASE-LAB-12650-1] c52 N81-29768
- BIOINSTRUMENTATION**
- Temperature compensated solid state differential amplifier with application in bioinstrumentation circuits
[NASA-CASE-XAC-00435] c09 N70-35440
- Electrode attached to helmets for detecting low level signals from skin of living creatures
[NASA-CASE-ARC-10043-1] c05 N71-11193
- Characteristics of pressed disc electrode for biological measurements
[NASA-CASE-XMS-04212-1] c05 N71-12346
- Development of apparatus and method for quantitatively measuring brain activity as automatic indication of sleep state and level of consciousness
[NASA-CASE-MSC-13282-1] c05 N71-24729
- Development and characteristics of electrodes in which poisoning by organic molecules is prevented by ion selective electrolytic deposition of hydrophilic protein colloid
[NASA-CASE-XMS-04213-1] c09 N71-26002
- Ultrasonic biomedical measuring and recording apparatus --- for recording motion of internal organs such as heart valves
[NASA-CASE-ARC-10597-1] c52 N74-20726
- Subminiature insertable force transducer --- including a strain gage to measure forces in muscles
[NASA-CASE-NPO-13423-1] c33 N75-31329
- Catheter tip force transducer for cardiovascular research
[NASA-CASE-NPO-13643-1] c52 N76-29896
- Biomedical ultrasonoscope
[NASA-CASE-ARC-10994-1] c52 N76-33835
- Thermistor holder for skin temperature measurements
[NASA-CASE-ARC-10855-1] c52 N77-10780
- Magnetic electrical connectors for biomedical percutaneous implants
[NASA-CASE-KSC-11030-1] c52 N77-25772
- Corneal seal device
[NASA-CASE-LBW-12258-1] c52 N77-28716
- Snap-in compressible biomedical electrode
[NASA-CASE-MSC-14623-1] c52 N77-28717
- Miniature implantable ultrasonic echosonometer
[NASA-CASE-ARC-11035-1] c52 N79-18580
- Induction powered biological radiosonde
[NASA-CASE-ARC-11120-1] c52 N80-18691
- Pulse transducer with artifact signal attenuator --- heart rate sensors
[NASA-CASE-FRC-11012-1] c52 N80-23969
- Method and automated apparatus for detecting coliform organisms
[NASA-CASE-MSC-16777-1] c51 N80-27067
- Simultaneous muscle force and displacement transducer
[NASA-CASE-NPO-14212-1] c52 N80-27072
- An implantable electrical device
[NASA-CASE-GSC-12560-1] c52 N80-27073
- Non-invasive method and apparatus for measuring pressure within a pliable vessel
[NASA-CASE-ARC-11264-1] c52 N81-33804
- BIOLUMINESCENCE**
- Detection instrument for light emitted from ATP biochemical reaction
[NASA-CASE-XGS-05534] c23 N71-16355
- Describing method for lyophilization of luciferase containing mixtures for use in life detection reactions
[NASA-CASE-XGS-05532] c06 N71-17705
- Application of luciferase assay for ATP to antimicrobial drug susceptibility
[NASA-CASE-GSC-12039-1] c51 N77-22794
- Rapid, quantitative determination of bacteria in water
[NASA-CASE-GSC-12158-1] c51 N78-22585
- BIOMEDICAL DATA**
- Silicon radiation detecting probe design for in vivo biomedical use
[NASA-CASE-XMS-01177] c05 N71-19440
- Biomedical ultrasonoscope
[NASA-CASE-ARC-10994-2] c52 N79-26771

BIOMETRICS

Characteristics of pressed disc electrode for
biological measurements
[NASA-CASE-XMS-04212-1] c05 N71-12346

Compressible electrolyte saturated sponge
electrode for biomedical applications
[NASA-CASE-MSC-13648] c05 N72-27103

Ultrasonic biomedical measuring and recording
apparatus --- for recording motion of internal
organs such as heart valves
[NASA-CASE-ARC-10597-1] c52 N74-20726

Arterial pulse wave pressure transducer
[NASA-CASE-GSC-11531-1] c52 N74-27566

Biomedical ultrasonoscope
[NASA-CASE-ARC-10994-1] c52 N76-33835

Miniature implantable ultrasonic echosonometer
[NASA-CASE-ARC-11035-1] c52 N79-18580

Biomedical ultrasonoscope
[NASA-CASE-ARC-10994-2] c52 N79-26771

Simultaneous muscle force and displacement
transducer
[NASA-CASE-NPO-14212-1] c52 N80-27072

Multifunctional transducer
[NASA-CASE-NPO-14329-1] c52 N81-20703

Sweat collection capsule
[NASA-CASE-ARC-11031-1] c52 N81-29763

Non-invasive method and apparatus for measuring
pressure within a pliable vessel
[NASA-CASE-ARC-11264-1] c52 N81-33804

BIOTELEMETRY
Biotelemetry apparatus with dual voltage
generators for implanting in animals
[NASA-CASE-XAC-05706] c05 N71-12342

Miniature multichannel biotelemetry system
[NASA-CASE-NPO-13065-1] c52 N74-26625

Medical subject monitoring systems ---
multichannel monitoring systems
[NASA-CASE-MSC-14180-1] c52 N76-14757

Accelerometer telemetry system
[NASA-CASE-ARC-10849-1] c17 N76-29347

Miniature ingestible telemetry devices to
measure deep-body temperature
[NASA-CASE-ARC-10583-1] c52 N76-29894

BIPOLEAR TRANSISTORS
Voltage regulator for battery power source ---
using a bipolar transistor
[NASA-CASE-FRC-10116-1] c33 N79-23345

BIREFRINGENCE
Automatic polarimeter capable of measuring
transient birefringence changes in
electro-optic materials
[NASA-CASE-XNP-08883] c23 N71-16101

BISMUTH
Manganese bismuth films with narrow transfer
characteristics for Curie-point switching
[NASA-CASE-NPO-11336-1] c76 N75-16678

BISMUTH COMPOUNDS
Hall effect magnetometer
[NASA-CASE-LEW-11632-2] c35 N75-13213

BISTABLE CIRCUITS
Bistable multivibrator circuits operating at
high speed and low power dissipation
[NASA-CASE-XGS-00823] c10 N71-15910

BIT SYNCHRONIZATION
Telemetry data unit to form multibit words for
use between demodulator and computer
[NASA-CASE-XNP-09225] c09 N69-24333

Bit synchronization system using digital data
transition tracking phased locked loop
[NASA-CASE-NPO-10844] c07 N72-20140

Bit synchronization of PCM communications
signal, without separate synchronization
channel by digital correlation
[NASA-CASE-NPO-11302-1] c07 N73-13149

Method and apparatus for a single channel
digital communications system ---
synchronization of received PCM signal by
digital correlation with reference signal
[NASA-CASE-NPO-11302-2] c32 N74-10132

BITERNARY CODE
Encoders designed to generate comma free
biorthogonal Reed-Muller type code comprising
conversion of 64 6-bit words into 64 32-bit
data for communication purposes
[NASA-CASE-NPO-10595] c10 N71-25917

BITS
Logic circuit for generating multibit binary
code word in parallel
[NASA-CASE-XNP-04623] c10 N71-26103

MOD 2 sequential function generator for multibit
sequence, with two-bit shift register for each
pair of bits
[NASA-CASE-NPO-10636] c08 N72-25210

Bit error rate measurement above and below bit
rate tracking threshold
[NASA-CASE-MSC-12743-1] c32 N79-10263

BLACK BODY RADIATION
Development of black-body source calibration
furnace
[NASA-CASE-XLE-01399] c33 N71-15625

Black body cavity radiometer with thermal
resistance wire bridge circuit
[NASA-CASE-XNP-08961] c14 N71-24809

Black body radiometer design with temperature
sensing and cavity heat source cone winding
[NASA-CASE-XNP-09701] c14 N71-26475

Black body radiometer having isothermally
surrounded cavity for ultraviolet, visible,
and infrared radiation
[NASA-CASE-NPO-10810] c14 N71-27323

BLADDER
Prosthetic urinary sphincter
[NASA-CASE-MPS-23717-1] c52 N81-25660

BLADE TIPS
Modification and improvement of turbine blades
for maximum cooling efficiency
[NASA-CASE-XLE-00092] c15 N70-33264

BLADES
Impact absorbing blade mounts for variable pitch
blades
[NASA-CASE-LEW-12313-1] c37 N78-10468

BLADES (CUTTERS)
Piston in bore cutter for severing parachute
control lines and sealing cable hole to
prevent water leakage into load
[NASA-CASE-XMS-04072] c15 N70-42017

Tissue macerating instrument
[NASA-CASE-LEW-12668-1] c52 N78-14773

BLAST LOADS
Development of apparatus for detonating
explosive devices in order to determine forces
generated and detonation propagation rate
[NASA-CASE-LAR-10800-1] c33 N72-27959

BLOCKS
Rotary target V-block --- aligning wind tunnel
apparatus for optical measurement
[NASA-CASE-LAR-12007-2] c74 N79-25876

BLOOD
Reduction of blood serum cholesterol
[NASA-CASE-NPO-12119-1] c52 N75-15270

Gas diffusion liquid storage bag and method of
use for storing blood
[NASA-CASE-NPO-13930-1] c52 N79-14749

Dialysis system --- using ion exchange resin
membranes permeable to urea molecules
[NASA-CASE-NPO-14101-1] c52 N80-14687

BLOOD PRESSURE
Blood pressure measuring system for separately
recording dc and ac pressure signals of
Korotkoff sounds
[NASA-CASE-XMS-06061] c05 N71-23317

Apparatus and method for processing Korotkov
sounds --- for blood pressure measurement
[NASA-CASE-MSC-13999-1] c52 N74-26626

Arterial pulse wave pressure transducer
[NASA-CASE-GSC-11531-1] c52 N74-27566

Circuit for detecting initial systole and
diastolic notch --- for monitoring arterial
pressure
[NASA-CASE-LEW-11581-1] c54 N75-13531

Non-invasive method and apparatus for measuring
pressure within a pliable vessel
[NASA-CASE-ARC-11264-1] c52 N81-33804

BLOOD VESSELS
Non-invasive method and apparatus for measuring
pressure within a pliable vessel
[NASA-CASE-ARC-11264-1] c52 N81-33804

BLUFF BODIES
Bluff-shaped annular configuration for
supersonic decelerator for reentry vehicles
[NASA-CASE-XLE-00222] c02 N70-37939

BLUNT BODIES
Wind tunnel method for simulating flow fields
around blunt vehicles entering planetary
atmospheres without involving high temperatures
[NASA-CASE-LAR-11138] c12 N71-20436

BODIES OF REVOLUTION
Conforming polisher for aspheric surfaces of

- revolution with inflatable tube
[NASA-CASE-XGS-02864] c15 N71-22705
- Test fixture for measuring moment of inertia of
irregularly shaped body with multiple axes
[NASA-CASE-XGS-01023] c14 N71-22992
- BODY FLUIDS**
- Programmable physiological infusion
[NASA-CASE-ABC-10447-1] c52 N74-22771
- Method of detecting and counting bacteria
[NASA-CASE-GSC-11917-2] c51 N76-29891
- Micro-fluid exchange coupling apparatus
[NASA-CASE-ABC-11114-1] c51 N81-14605
- BODY KINEMATICS**
- Space suit with improved waist and torso movement
[NASA-CASE-ABC-10275-1] c05 N72-22092
- Controller arm for a remotely related slave arm
[NASA-CASE-ABC-11052-1] c37 N79-28551
- Kinematic method and apparatus
[NASA-CASE-MSC-18929-1] c54 N81-15699
- BODY MEASUREMENT (BIOLOGY)**
- Biomedical ultrasonoscope
[NASA-CASE-ABC-10994-1] c52 N76-33835
- Miniature implantable ultrasonic echosonometer
[NASA-CASE-ABC-11035-1] c52 N79-18580
- Kinematic method and apparatus
[NASA-CASE-MSC-18929-1] c54 N81-15699
- Apparatus for determining changes in limb volume
[NASA-CASE-MSC-18759-1] c52 N81-24716
- BODY TEMPERATURE**
- Thermoregulating with cooling flow pipe network
for humans
[NASA-CASE-XMS-10269] c05 N71-24147
- Miniature ingestible telemeter devices to
measure deep-body temperature
[NASA-CASE-ABC-10583-1] c52 N76-29894
- BODY VOLUME (BIOLOGY)**
- Whole body measurement systems --- for
weightlessness simulation
[NASA-CASE-MSC-13972-1] c52 N74-10575
- Apparatus for determining changes in limb volume
[NASA-CASE-MSC-18759-1] c52 N81-24716
- BODY-WING CONFIGURATIONS**
- Free wing assembly for an aircraft
[NASA-CASE-FRC-10092-1] c05 N79-12061
- BOILERS**
- Vapor generating boiler system for turbine motor
[NASA-CASE-XLE-00785] c33 N71-16104
- Shell-side liquid metal boiler employing tube
and shell heat exchanger
[NASA-CASE-NPO-10831] c33 N72-20915
- BOLOMETERS**
- High impedance alternating current sensing
transformer device between two bolometers for
measuring insertion loss of test component
[NASA-CASE-XNP-01193] c10 N71-16057
- Thin film capacitive bolometer and capacitance
temperature interchange sensor
[NASA-CASE-NPO-10607] c09 N71-27232
- Wedge immersed thermistor bolometers
[NASA-CASE-XGS-01245-1] c35 N79-33449
- BOLTS**
- Patent data on gas actuated bolt disconnect
assembly
[NASA-CASE-XLA-00326] c03 N70-34667
- Bolt-latch mechanism for releasing despin
weights from space vehicle
[NASA-CASE-XLA-00679] c15 N70-38601
- Gage for quality control of sealing surfaces of
threaded boss
[NASA-CASE-XMF-04966] c14 N71-17658
- Split nut and bolt separation device
[NASA-CASE-XNP-06914] c15 N71-21489
- Device for securing together structural members
with axially stretched bolt and nut
[NASA-CASE-GSC-11149-1] c15 N73-30457
- BONDING**
- Silver chloride use in technique for fusion
bonding of graphite to silver, glass,
ceramics, and certain other metals
[NASA-CASE-XGS-00963] c15 N69-39735
- Bonded joint and method --- for reducing peak
shear stress in adhesive bonds
[NASA-CASE-LAR-10900-1] c37 N74-23064
- Bonding method in the manufacture of continuous
regression rate sensor devices
[NASA-CASE-LAR-10337-1] c24 N75-30260
- Strain arrestor plate for fused silica tile ---
bonding of thermal insulation to metallic
plates or structural parts
- [NASA-CASE-MSC-14182-1] c27 N76-14264
- Bonding machine for forming a solar array strip
[NASA-CASE-NPO-13652-2] c44 N79-24431
- Bonding of sapphire to sapphire by eutectic
mixture of aluminum oxide and zirconium oxide
[NASA-CASE-GSC-11577-3] c24 N79-25143
- Improved attachment system for silica tiles ---
thermal protection for space shuttle orbiter
[NASA-CASE-MSC-18741-1] c16 N81-16110
- Method of making a partial interlaminar
separation composite system
[NASA-CASE-LAR-12065-2] c24 N81-33235
- BONES**
- Ultrasonic bone densitometer
[NASA-CASE-MFS-20994-1] c35 N75-12271
- Method and system for in vivo measurement of
bone tissue using a two level energy source
[NASA-CASE-MSC-14276-1] c52 N77-14737
- Method of adhering bone to a rigid substrate
using a graphite fiber reinforced bone cement
[NASA-CASE-NPO-13764-1] c27 N78-17215
- BOOMS (EQUIPMENT)**
- Unfolding boom assembly with knuckle joints for
positioning equipment for spacecraft
[NASA-CASE-XGS-00938] c32 N70-41367
- Collapsible antenna boom and coaxial
transmission line having inflatable inner tube
[NASA-CASE-MPS-20068] c07 N71-27191
- Extendable, self-deploying boom apparatus
[NASA-CASE-GSC-10566-1] c15 N72-18477
- Design and characteristics of mechanically
extended and telescoping boom on crane assembly
[NASA-CASE-NPO-11118] c03 N72-25021
- BOOSTER RECOVERY**
- Techniques for recovery of multistage rocket
vehicles by providing lifting surfaces on
individual sections
[NASA-CASE-XMF-00389] c31 N70-34176
- Recoverable, reusable single stage booster
capable of injecting large payloads into
circular earth orbit
[NASA-CASE-XMF-01973] c31 N70-41588
- Orbiter/launch system
[NASA-CASE-LAR-12250-1] c14 N81-26161
- BOOSTER ROCKET ENGINES**
- Segmented back-up bar for butt welding large
tubular structures such as rocket booster
bodies or tanks
[NASA-CASE-XMF-00640] c15 N70-39924
- Recoverable, reusable single stage booster
capable of injecting large payloads into
circular earth orbit
[NASA-CASE-XMF-01973] c31 N70-41588
- BOOTS (FOOTWEAR)**
- Walking boot assembly
[NASA-CASE-ABC-11101-1] c54 N78-17675
- BORIDES**
- Cesium thermionic converters having improved
electrodes
[NASA-CASE-LBW-12038-3] c44 N78-25555
- BORING MACHINES**
- Automatic controlled drive mechanism for
portable boring bar
[NASA-CASE-XLA-03661] c15 N71-33518
- Borehole geological assessment
[NASA-CASE-NPO-14231-1] c46 N80-10709
- BORON**
- Radiation hardening of MOS devices by boron ---
for stabilizing gate threshold potential of
field effect device
[NASA-CASE-GSC-11425-1] c76 N74-20329
- BORON CARBIDES**
- Catalyst for increased growth of boron carbide
crystal whiskers
[NASA-CASE-XHQ-03903] c15 N69-21922
- BORON FLUORIDES**
- Boron trifluoride coatings for thermoplastic
materials and method of applying same in glow
discharge
[NASA-CASE-ABC-11057-1] c27 N78-31233
- BOUNDARY LAYER CONTROL**
- Double hinged flap for boundary layer control
over trailing edges of wings
[NASA-CASE-XLA-01290] c02 N70-42016
- Aerodynamic side-force alleviator means
[NASA-CASE-LAR-12326-1] c02 N81-14968
- BOUNDARY LAYER SEPARATION**
- Tertiary flow injection system for thrust
vectoring of propulsive nozzle flow

- [NASA-CASE-MFS-20831] c28 N71-29153
controlled separation combustor --- airflow
distribution in gas turbine engines
[NASA-CASE-LEW-11593-1] c20 N76-14190
Self stabilizing sonic inlet
[NASA-CASE-LEW-11890-1] c05 N79-24976
- BOUNDARY LAYER TRANSITION**
Detection of the transitional layer between
laminar and turbulent flow areas on a wing
surface --- using an accelerometer to measure
pressure levels during wind tunnel tests
[NASA-CASE-LAR-12261-1] c02 N80-20224
- BOUNDARY LAYERS**
Flow meter for measuring stagnation pressure in
boundary layer around high speed flight vehicle
[NASA-CASE-XPB-02007] c12 N71-24692
Development of thermocouple instrument for
measuring temperature of wall heated by
flowing fluid without disturbing boundary layer
[NASA-CASE-XLB-05230] c14 N72-27410
- BOXES (CONTAINERS)**
Sealed storage container for channel carriers
with mounted miniature electronic components
[NASA-CASE-MFS-20075] c09 N71-26133
- BRACKETS**
Electrical servo actuator bracket --- fuel
control valves on jet engines
[NASA-CASE-FRC-11044-1] c37 N81-33483
- BRAKES (FOR ARRESTING MOTION)**
Energy dissipating shock absorbing system for
land payload recovery or vehicle braking
[NASA-CASE-XLA-00754] c15 N70-34850
Automatic braking device for rapidly
transferring humans or materials from elevated
location
[NASA-CASE-XKS-07814] c15 N71-27067
Sprag solenoid brake --- development and
operations of electrically controlled brake
[NASA-CASE-MFS-21846-1] c37 N74-26976
Reel safety brake
[NASA-CASE-GSC-11960-1] c37 N77-14479
Motion restraining device
[NASA-CASE-NFO-13619-1] c37 N78-16369
Moving body velocity arresting line ---
elongating steel cable
[NASA-CASE-LAR-12372-1] c37 N80-18399
- BRAKING**
Direct current electromotive system for
regenerative braking of electric motor
[NASA-CASE-XMF-01096] c10 N71-16030
Linear magnetic braking system with nonuniformly
wrapped primary coil producing constant
braking force on secondary coil
[NASA-CASE-XLE-05079] c15 N71-17652
Anemometer with braking mechanism to prevent
rotation of wind driven elements
[NASA-CASE-XMF-05224] c14 N71-23726
- BRAZING**
Anti-wettable materials brazing processes using
titanium and zirconium for surface pretreatment
[NASA-CASE-XMS-03537] c15 N69-21471
Application techniques for protecting materials
during salt bath brazing
[NASA-CASE-XLE-00046] c15 N70-33311
Joining aluminum to stainless steel by bonding
aluminum coatings onto titanium coated
stainless steel and brazing aluminum to
aluminum/titanium coated steel
[NASA-CASE-MFS-07369] c15 N71-20443
Brazing alloy adapted for brazing corrosion
resistant steel to refractory metals, also for
brazing refractory metals to other refractory
metals
[NASA-CASE-XNP-03063] c17 N71-23365
Brazing alloy binder
[NASA-CASE-XMF-05868] c26 N75-27125
Brazing alloy composition
[NASA-CASE-XMF-06053] c26 N75-27126
Brazing alloy
[NASA-CASE-XNP-03878] c26 N75-27127
Method of fluxless brazing and diffusion bonding
of aluminum containing components
[NASA-CASE-MSC-14435-1] c37 N76-18455
- BREATHING APPARATUS**
Three-port transfer valve with one port open
continuously suitable for manned space flight
[NASA-CASE-IAC-01158] c15 N71-23051
Self-contained breathing apparatus
[NASA-CASE-MSC-14733-1] c54 N76-24900
- Portable breathing system --- a breathing
apparatus using a rebreathing system of heat
exchangers for carbon dioxide removal
[NASA-CASE-MSC-16182-1] c54 N80-10799
- BRICKS**
Development of construction block in form of
container folded from flat sheet and filled
with solid material for architectural purposes
[NASA-CASE-MSC-12233-2] c32 N73-13921
- BRIGHTNESS**
Modulating and controlling intensity of light
beam from high temperature source by
servocontrolled rotating cylinders
[NASA-CASE-XMS-04300] c09 N71-19479
- BRIGHTNESS DISCRIMINATION**
Video signal processing system for sampling
video brightness levels
[NASA-CASE-NFO-10140] c07 N71-24742
Automated visual sensitivity tester for
determining visual field sensitivity and blind
spot size
[NASA-CASE-ABC-10329-1] c05 N73-26072
Illumination control apparatus for compensating
solar light
[NASA-CASE-KSC-11010-1] c74 N79-12890
- BRITTLENESS**
Rock sampling --- apparatus for controlling
particle size
[NASA-CASE-XNP-10007-1] c46 N74-23068
Rock sampling --- method for controlling
particle size distribution
[NASA-CASE-XNP-09755] c46 N74-23069
- BROADBAND**
Broadband chokes and absorbers to reduce
spurious radiation patterns of antenna array
caused by support structures
[NASA-CASE-XMS-05303] c07 N69-27462
Flexible monopole antenna with broad bandwidth
and low voltage standing wave ratio
[NASA-CASE-MSC-12101] c09 N71-18720
Broadband frequency discriminator with resistive
captive inductive networks
[NASA-CASE-NFO-10096] c07 N71-24583
Broadband microwave waveguide window to
compensate dielectric material filling
[NASA-CASE-XNP-08880] c09 N71-24808
Comb type traveling wave maser amplifier for
improved high gain broadband output
[NASA-CASE-NFO-10548] c16 N71-24831
Wideband voltage controlled oscillator with high
phase stability
[NASA-CASE-XLA-03893] c10 N71-27271
Multimode antenna feed system for microwave and
broadband communication
[NASA-CASE-GSC-11046-1] c07 N73-28013
Multifrequency broadband polarized horn antenna
[NASA-CASE-NFO-14588-1] c32 N81-25278
- BROADBAND AMPLIFIERS**
Solid state broadband stable power amplifier
[NASA-CASE-XNP-10854] c10 N71-26331
Broadband distribution amplifier with
complementary pair transistor output stages
[NASA-CASE-NFO-10003] c10 N71-26415
- BROADCASTING**
Vehicle locating system utilizing AM
broadcasting station carriers
[NASA-CASE-NFO-13217-1] c32 N75-26194
- BROMINE**
Hydrogen-bromine secondary battery
[NASA-CASE-NFO-13237-1] c44 N76-18641
- BRUSHES**
Fabrication of sintered impurity semiconductor
brushes for electrical energy transfer
[NASA-CASE-XMF-01016] c26 N71-17818
- BRUSHES (ELECTRICAL CONTACTS)**
Liquid metal slip ring
[NASA-CASE-LEW-12277-2] c33 N78-25323
- BUCKLING**
Miniature vibration isolator utilizing elastic
tubing material
[NASA-CASE-XLA-01019] c15 N70-40156
Test equipment to prevent buckling of small
diameter specimens during compression tests
[NASA-CASE-LAR-10440-1] c14 N73-32323
- BUFFER STORAGE**
Data handling based on source significance,
storage availability, and data received from
source
[NASA-CASE-XNP-04162-1] c08 N70-34675

- Data acquisition and processing system with buffer storage and timing device for magnetic tape recording of PCM data and timing information
[NASA-CASE-NPO-12107] c08 N71-27255
- Digital to analog converter with parallel input/output memory device
[NASA-CASE-KSC-10397] c08 N72-25206
- Common data buffer system --- communication with computational equipment utilized in spacecraft operations
[NASA-CASE-KSC-11048-1] c62 N81-24779
- BUILDINGS**
Apparatus and method of assembling building blocks by folding pre-cut flat sheets of material during on-site construction
[NASA-CASE-MSC-12233-1] c15 N72-25454
- BULBS**
External bulb variable volume maser
[NASA-CASE-GSC-12334-1] c36 N79-14362
- BULKHEADS**
Liquid propellant tank design with semitoroidal bulkhead
[NASA-CASE-XMF-01899] c31 N70-41948
- BUOYANCY**
Inflatable radar reflector unit - lightweight, highly reflective to electromagnetic radiation, and adaptable for erection and deployment with minimum effort and time
[NASA-CASE-XMS-00893] c07 N70-40063
- High visibility air sea rescue panel
[NASA-CASE-MSC-12564-2] c03 N78-25070
- BURNING RATE**
Pressurized gas injection for burning rate control of solid propellants
[NASA-CASE-XLB-03494] c27 N71-21819
- Development of apparatus for testing burning rate and flammability of materials
[NASA-CASE-XMS-09690] c33 N72-25913
- Nitramine propellants --- gun propellant burning rate
[NASA-CASE-NPO-14103-1] c28 N78-31255
- BURNOUT**
Spherical solid propellant rocket engine having abrupt burnout
[NASA-CASE-XHQ-01897] c28 N70-35381
- BURNS (INJURIES)**
Medical diagnosis system and method with multispectral imaging --- depth of burns and optical density of the skin
[NASA-CASE-NPO-14402-1] c52 N81-27783
- BUS CONDUCTORS**
Electrical short locator --- identifying shorts occurring while an electrical system is being wired
[NASA-CASE-ARC-11116-1] c33 N79-31498
- BUTT JOINTS**
Channel-type shell construction for rocket engines and related configurations
[NASA-CASE-XLE-00144] c28 N70-34860
- Segmented back-up bar for butt welding large tubular structures such as rocket booster bodies or tanks
[NASA-CASE-XMF-00640] c15 N70-39524
- Apparatus for welding sheet material --- butt joints
[NASA-CASE-XMS-01330] c37 N75-27376
- BUTTERFLY VALVES**
Flexible inflatable seal for butterfly valves
[NASA-CASE-XLE-00101] c15 N70-33376
- BYPASSES**
Low power drain transistor feedback circuit
[NASA-CASE-XGS-04999] c09 N69-24317
- Helical coaxial resonator RF filter
[NASA-CASE-XGS-02816] c07 N69-24323
- Current regulating voltage divider design with load current shunting
[NASA-CASE-MFS-20935] c09 N71-34212
- Electrical interconnection of unilluminated solar cells in solar battery array
[NASA-CASE-GSC-10344-1] c03 N72-27053
- Shunt regulation electric power system
[NASA-CASE-GSC-10135] c33 N78-17296
- imposed
[NASA-CASE-MSC-12052-1] c15 N71-24599
- CABLES**
Cable guide and restraint device for reefing tubes in uniform manner
[NASA-CASE-LAR-10129-1] c15 N73-25512
- Deployable flexible tunnel
[NASA-CASE-MFS-22636-1] c37 N76-22540
- CABLES (ROPES)**
High voltage cable for use in high intensity ionizing radiation fields
[NASA-CASE-XNP-00738] c09 N70-38201
- Force separation rigid tethering device using cables
[NASA-CASE-XLA-02332] c32 N71-17609
- Support for flexible conductor cable between drawers or racks holding electronic equipment and cabinet assembly housing drawers or racks
[NASA-CASE-XMF-07587] c15 N71-18701
- Design and construction of satellite appendage tie-down cord
[NASA-CASE-XGS-02554] c31 N71-21064
- Quick attach mechanism for moving or stationary wires, ropes, or cables
[NASA-CASE-XFB-05421] c15 N71-22994
- Flexible cable that can be made rigid
[NASA-CASE-MSC-13512-1] c15 N72-22485
- Guide member for stabilizing cable of open shaft elevator
[NASA-CASE-KSC-10513] c15 N72-25453
- Reefing system
[NASA-CASE-LAR-10129-2] c37 N74-20063
- Emergency descent device
[NASA-CASE-MFS-23074-1] c54 N77-21844
- Moving body velocity arresting line --- elongating steel cable
[NASA-CASE-LAR-12372-1] c37 N80-18399
- Belt for transmitting power from a cogged driving member to a cogged driven member
[NASA-CASE-GSC-12289-1] c37 N80-32717
- CADMIUM SULFIDES**
High field CdS detector for infrared radiation
[NASA-CASE-LAR-11027-1] c35 N74-18088
- CDS solid state phase insensitive ultrasonic transducer --- annealing cadmium sulfide crystals
[NASA-CASE-LAR-12304-1] c35 N80-20559
- CALCIUM**
Ultrasonic bone densitometer
[NASA-CASE-MFS-20994-1] c35 N75-12271
- CALCIUM FLUORIDES**
Bonded solid lubricant coatings of calcium fluoride and binder for high temperature stability
[NASA-CASE-XMS-00259] c18 N70-36400
- Production of barium fluoride-calcium fluoride composite lubricant for bearings or seals
[NASA-CASE-XLE-08511-2] c18 N71-16105
- CALCIUM OXIDES**
Process for the preparation of calcium superoxide
[NASA-CASE-AEC-11053-1] c25 N79-10162
- CALCIUM PHOSPHATES**
Process for preparing calcium phosphate salts for tooth repair
[NASA-CASE-EBC-10338] c04 N72-33072
- CALCULATORS**
Sun angle calculator
[NASA-CASE-MSC-12617-1] c35 N76-29552
- CALIBRATING**
Development and characteristics of self-calibrating displacement transducer for measuring magnitude and frequency of displacement of bodies
[NASA-CASE-XLA-00781] c09 N71-22999
- Combination pressure transducer-calibrator assembly for measuring fluid
[NASA-CASE-XNP-01660] c14 N71-23036
- Control system for pressure balance device used in calibrating pressure gages
[NASA-CASE-XMF-04134] c14 N71-23755
- Phonocardiogram simulator producing electrical voltage waves to control amplitude and duration between simulated sounds
[NASA-CASE-XKS-10804] c05 N71-24606
- Calibrator for measuring and modulating or demodulating laser outputs
[NASA-CASE-XLA-03410] c16 N71-25914
- Plastic sphere for radar tracking and calibration
[NASA-CASE-XLA-11154] c07 N72-21117

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CABLE FORCE RECORDERS

Design and characteristics of device for showing amount of cable payed out from winch and load

- Calibration of vacuum gauges for measuring total and partial pressures in ultrahigh vacuum region
[NASA-CASE-IGS-07752] c14 N73-30390
- System for calibrating pressure transducer
[NASA-CASE-LAR-10910-1] c35 N74-13132
- In situ transfer standard for ultrahigh vacuum gage calibration
[NASA-CASE-LAR-10862-1] c35 N74-15092
- Ergometer calibrator --- for any ergometer utilizing rotating shaft
[NASA-CASE-MFS-21045-1] c35 N75-15932
- Ultrasonic calibration device --- for producing changes in acoustic attenuation and phase velocity
[NASA-CASE-LAR-11435-1] c35 N76-15432
- High temperature strain gage calibration fixture
[NASA-CASE-LAR-11500-1] c35 N76-24523
- Electronically scanned pressure sensor module with in SITU calibration capability
[NASA-CASE-LAR-12230-1] c35 N79-14347
- Calibrating pressure switch
[NASA-CASE-XMF-04494-1] c33 N79-33392
- Electromagnetic power absorber
[NASA-CASE-NPO-13830-1] c32 N80-14281
- Automatic flowmeter calibration system
[NASA-CASE-KSC-11076-1] c34 N81-26402
- Method and apparatus for precision control of radiometer
[NASA-CASE-NPO-15398-1] c35 N81-33449
- CALORIMETERS**
- Development and characteristics of calorimeter with integral heat sink for maintenance of constant temperature
[NASA-CASE-XMF-04208] c33 N71-29051
- Heat flow calorimeter --- measures output of Ni-Cd batteries
[NASA-CASE-GSC-11434-1] c34 N74-27859
- Containerless high temperature calorimeter apparatus
[NASA-CASE-MFS-23923-1] c35 N81-19426
- CAMERA SHUTTERS**
- Electrically operated rotary shutter for television camera aboard spacecraft
[NASA-CASE-XNP-00637] c14 N70-40273
- Magnetically opened diaphragm design with camera shutter and expansion tube applications
[NASA-CASE-XLA-03660] c15 N71-21060
- Development and characteristics of cyclically operable, optical shutter for use as focal plane shutter for transmitting single radiation pulses
[NASA-CASE-NPO-10758] c14 N73-14427
- Rotary solenoid shutter drive assembly and rotary inertia damper and stop plate assembly --- for use with cameras mounted in satellites
[NASA-CASE-GSC-11560-1] c33 N74-20861
- CAMERAS**
- Mechanism for measuring nanosecond time differences between luminous events using streak camera
[NASA-CASE-XLA-01987] c23 N71-23576
- Camera adapter design for image magnification including lens and illuminator
[NASA-CASE-XMF-03844-1] c14 N71-26474
- Longitudinal film gate and lock mechanism for securing film in motion picture cameras under vibration and high acceleration loads
[NASA-CASE-LAR-10686] c14 N71-28935
- Design and characteristics of laser camera system with diffusion filter of small particles with average diameter larger than wavelength of laser light
[NASA-CASE-NPO-10417] c16 N71-33410
- Optical scanner with linear housing and rotating camera
[NASA-CASE-NPO-11002] c14 N72-22441
- Apparatus for on-film optical recording of camera lens aperture and focus setting
[NASA-CASE-MSC-12363-1] c14 N73-26431
- Mechanical exposure interlock device for preventing film overexposure in oscilloscope camera
[NASA-CASE-LAR-10319-1] c14 N73-32322
- Real time moving scene holographic camera system
[NASA-CASE-MFS-21067-1] c35 N74-17153
- Automatic focus control for facsimile cameras
[NASA-CASE-LAR-11213-1] c35 N75-15014
- Spectrometer integrated with a facsimile camera
[NASA-CASE-LAR-11207-1] c35 N75-19613
- Real time, large volume, moving scene holographic camera system
[NASA-CASE-MFS-22537-1] c35 N75-27328
- Holographic motion picture camera with Doppler shift compensation
[NASA-CASE-MFS-22517-1] c35 N76-18402
- Camera arrangement --- for satellite scanning of earth or sky
[NASA-CASE-GSC-12032-2] c35 N76-19408
- Constant magnification optical tracking system
[NASA-CASE-NPO-14813-1] c74 N80-24152
- CAMS**
- Controlled caging and uncaging mechanism
[NASA-CASE-GSC-11063-1] c37 N77-27400
- Cam-operated pitch-change apparatus
[NASA-CASE-LRW-13050-1] c07 N79-14095
- CANARD CONFIGURATIONS**
- Thrust and attitude control apparatus using jet nozzle in movable canard surface or fin configuration
[NASA-CASE-XLB-03583] c31 N71-17629
- Supersonic transport --- using canard surfaces
[NASA-CASE-LAR-11932-1] c05 N78-32086
- CANCER**
- A cervix-to-rectum measuring device in a radiation applicator for use in the treatment of cervical cancer
[NASA-CASE-GSC-12081-2] c52 N77-26796
- Coupling apparatus for ultrasonic medical diagnostic system
[NASA-CASE-NPO-13935-1] c52 N79-14751
- CANOPIES**
- Transparent fire resistant polymeric structures
[NASA-CASE-AEC-10813-1] c27 N76-16230
- Aircraft canopy lock
[NASA-CASE-PBC-11065-1] c05 N81-24047
- CANS**
- Design and characteristics of device for closing canisters under high vacuum conditions
[NASA-CASE-XLA-01446] c15 N71-21528
- Extrusion can for extruding ceramics under heat and pressure
[NASA-CASE-NPO-10812] c15 N73-13464
- CANTILEVER BEAMS**
- Pneumatic cantilever beams and platform for space erectable structure
[NASA-CASE-XLA-01731] c32 N71-21045
- Cantilever mounted resilient pad gas bearing
[NASA-CASE-LRW-12569-1] c37 N79-10418
- CANTILEVER MEMBERS**
- Deployable cantilever support for deploying solar cell arrays aboard spacecraft and reducing transient loading
[NASA-CASE-NPO-10883] c31 N72-22874
- Miniature biaxial strain transducer
[NASA-CASE-LAR-11648-1] c35 N77-14407
- CAPACITANCE**
- Capacitance measuring device for determining flare accuracy on tapered tubes
[NASA-CASE-IKS-03495] c14 N69-39785
- Device for measuring two orthogonal components of force with gallium flotation of measuring target for use in vacuum environments
[NASA-CASE-IAC-04885] c14 N71-23790
- Thin film capacitive bolometer and capacitance temperature interchange sensor
[NASA-CASE-NPO-10607] c09 N71-27232
- Capacitive tank gaging device for monitoring one constituent of two phase fluid by sensing dielectric constant
[NASA-CASE-MFS-21629] c14 N72-22442
- Capacitance multiplier and filter synthesizing network
[NASA-CASE-NFO-11948-1] c33 N74-32712
- Direct reading inductance meter
[NASA-CASE-NFO-13792-1] c35 N77-32455
- Dynamic capacitor having a peripherally driven element and system incorporating the same
[NASA-CASE-XNP-02899-1] c33 N79-21265
- CAPACITANCE SWITCHES**
- Electric discharge apparatus for electrohydraulic explosive forming
[NASA-CASE-XMF-00375] c15 N70-34249
- Extra-long monostable multivibrator employing bistable semiconductor switch to allow charging of timing circuit
[NASA-CASE-IGS-00381] c09 N70-34819
- Feedback integrating circuit with grounded capacitor for signal processing

- [NASA-CASE-IAC-10607] c10 N71-23669
- CAPACITORS**
- Temperature sensitive capacitor device for detecting very low intensity infrared radiation [NASA-CASE-XNP-05750] c14 N69-39537
- Electrical power system for space flight vehicles operating over extended periods [NASA-CASE-XNP-00517] c03 N70-34157
- Capacitor for measuring density of compressible fluid in liquid, gas, or liquid and gas phases [NASA-CASE-XLE-00143] c14 N70-36618
- Capacitor sandwich structure containing metal sheets of known thickness for counting penetration rates of meteoroids [NASA-CASE-XLE-01246] c14 N71-10797
- Capacitor fabrication by solidifying mixture of ferromagnetic metal particles, nonferromagnetic particles, and dielectric material [NASA-CASE-LEW-10364-1] c09 N71-13522
- Mechanism for measuring nanosecond time differences between luminous events using streak camera [NASA-CASE-XLA-01987] c23 N71-23976
- Circuit for monitoring power supply by ripple current indication [NASA-CASE-KSC-10162] c09 N72-11225
- Thermodielectric radiometer using polymer film as capacitor [NASA-CASE-ARC-10138-1] c14 N72-24477
- Material compositions and processes for developing dielectric thick films used in microcircuit capacitors [NASA-CASE-LAR-10294-1] c26 N72-28762
- Micrometeoroid analyzer using arrays of interconnected capacitors and ion detector [NASA-CASE-ARC-10443-1] c14 N73-20477
- Insulated electrocardiographic electrodes --- without paste electrolyte [NASA-CASE-MSC-14339-1] c05 N75-24716
- High temperature beryllium oxide capacitor [NASA-CASE-LEW-11938-1] c33 N76-15373
- Energy storage apparatus [NASA-CASE-GSC-12030-1] c44 N78-24608
- Regulated high efficiency, lightweight capacitor-diode multiplier dc to dc converter [NASA-CASE-LEW-12791-1] c33 N78-32341
- Dynamic capacitor having a peripherally driven element and system incorporating the same [NASA-CASE-XNP-02899-1] c33 N79-21265
- CAPILLARY FLOW**
- Capillary radiator for carrying heat transfer liquid in planetary spacecraft structures [NASA-CASE-XLE-03307] c33 N71-14035
- Lubrication for bearings by capillary action from oil reservoir of porous material [NASA-CASE-XNP-03972] c15 N71-23048
- Soldering device particularly suited to making high quality wiring joints for aerospace engineering utilizing capillary attraction to regulate flow of solder [NASA-CASE-XLA-08911] c15 N71-27214
- Capillary flow weld-bonding [NASA-CASE-LAR-11726-1] c37 N76-27568
- Heat pipes containing alkali metal working fluid [NASA-CASE-LEW-12253-1] c34 N81-22310
- CAPILLARY TUBES**
- Tubular flow restrictor for gas flow control in pipeline [NASA-CASE-NPO-10117] c15 N71-15608
- Development of liquid separating system using capillary device connected to flexible bladder storage chamber [NASA-CASE-XMS-13052] c14 N71-20427
- Interrupter switching device utilizing electrodes and mercury filled capillary tubes in which current flow vaporizes mercury as circuit breaker [NASA-CASE-XNP-02251] c12 N71-20896
- Diffused waveguiding capillary tube with distributed feedback for a gas laser [NASA-CASE-NPO-13544-1] c36 N76-18428
- CARBAZOLES**
- Method of producing output voltage from photovoltaic cell using poly-N-vinyl carbazole complexed with iodine [NASA-CASE-NPO-10373] c03 N71-18698
- CARBOHYDRATES**
- Decontamination of petroleum products with honey [NASA-CASE-XNP-03835] c06 N71-23499
- CARBON**
- Low density bismaleimide-carbon microballoon composites --- aircraft and submarine compartment safety [NASA-CASE-ARC-11040-2] c24 N78-27184
- Electrophotolysis oxidation system for measurement of organic concentration in water [NASA-CASE-MSC-16497-1] c25 N79-23167
- Improved synthesis of polyformals [NASA-CASE-ARC-11244-1] c27 N79-30376
- CARBON ARCS**
- Water cooled contactors for holding rotating carbon arc anode [NASA-CASE-XMS-03700] c15 N69-24266
- CARBON COMPOUNDS**
- Vapor deposited laminated nitride-silicon coating for corrosion prevention of carbonaceous surfaces [NASA-CASE-XLA-00284] c15 N71-16075
- Surfactant-assisted liquefaction of particulate carbonaceous substances [NASA-CASE-NPO-13904-1] c25 N79-11152
- CARBON DIOXIDE**
- Carbon dioxide purge systems to prevent condensation in spaces between cryogenic fuel tanks and hypersonic vehicle skin [NASA-CASE-XLA-01967] c31 N70-42015
- Fast response miniature carbon dioxide detector with no moving parts for measuring concentration in any atmosphere [NASA-CASE-MSC-13332-1] c14 N72-21408
- Metabolic rate meter and method [NASA-CASE-MSC-12239-1] c52 N79-21750
- CARBON DIOXIDE LASERS**
- Repetitively pulsed wavelength selective carbon dioxide laser [NASA-CASE-ERC-10178] c16 N71-24832
- Performance of ac power supply developed for CO2 laser system [NASA-CASE-GSC-11222-1] c16 N73-32391
- Stark-effect modulation of CO2 laser with NH2D [NASA-CASE-NPO-11945-1] c36 N76-18427
- Tunable injection-locked pulsed CO2 laser [NASA-CASE-NPO-14984-1] c36 N81-15350
- CARBON DIOXIDE REMOVAL**
- Catalyst cartridge for carbon dioxide reduction unit [NASA-CASE-LAR-10551-1] c25 N74-12813
- Regenerable device for scrubbing breathable air of CO2 and moisture without special heat exchanger equipment [NASA-CASE-MSC-14771-1] c54 N77-32722
- Portable breathing system --- a breathing apparatus using a rebreathing system of heat exchangers for carbon dioxide removal [NASA-CASE-MSC-16182-1] c54 N80-10799
- CARBON FIBER REINFORCED PLASTICS**
- Low density bismaleimide-carbon microballoon composites [NASA-CASE-ARC-11040-1] c24 N79-16915
- Circumferential shaft seal [NASA-CASE-LEW-12119-1] c37 N80-28711
- Curing agent for polyepoxides and epoxy resins and composites cured therewith --- preventing carbon fiber release [NASA-CASE-LEW-13226-1] c27 N81-17260
- CARBON MONOXIDE**
- Carbon monoxide monitor --- using real time operation [NASA-CASE-MPS-22060-1] c35 N75-29380
- CARBONATES**
- Chemical and physical properties of synthetic polyurethane polymer prepared by reacting hydroxy carbonate with organic diisocyanate [NASA-CASE-MPS-10512] c06 N73-30099
- Synthesis of dawsonites [NASA-CASE-ARC-113261-1] c25 N80-31490
- CARBONIZATION**
- Method of carbonizing polyacrylonitrile fibers and resulting product [NASA-CASE-ARC-11261-1] c24 N81-29164
- CARBONYL COMPOUNDS**
- Coal desulfurization --- using iron pentacarbonyl [NASA-CASE-NPO-14272-1] c25 N81-33246
- CARBORANE**
- Carboranylcyclotriphosphazenes and their polymers --- thermal insulation [NASA-CASE-ARC-11176-1] c27 N80-21533

- Process for the preparation of polycarboranylphosphazenes --- thermal insulation
[NASA-CASE-ARC-11176-2] c27 N81-27271
- CARBOXYL GROUP**
Carboxyl terminated polyester prepolymers and foams produced from prepolymers and materials
[NASA-CASE-NPO-10596] c06 N71-25929
- CARBOXYLIC ACIDS**
Stable polyimide synthesis from mixtures of monomeric diamines and polycarboxylic acid esters
[NASA-CASE-LEW-11325-1] c06 N73-27980
Fluorinated esters of polycarboxylic acid and lubricating compositions for use at extreme temperature
[NASA-CASE-HFS-21040-1] c06 N73-30098
- CARCINOGENS**
Spectrophotofluorometer with 3-dimensional display to identify fluorescence spectra of carcinogenic and noncarcinogenic hydrocarbons
[NASA-CASE-XGS-01231] c14 N70-41676
- CARDIAC VENTRICLES**
Contour detector and data acquisition system for the left ventricular outline
[NASA-CASE-ARC-10985-1] c52 N79-10724
- CARDIOGRAPHY**
Digital cardiometer incorporating circuit for measuring heartbeat rate of subject over predetermined portion of one minute also converting rate to beats per minute
[NASA-CASE-XMS-02399] c05 N71-22896
Reference apparatus for medical ultrasonic transducer
[NASA-CASE-ARC-10753-1] c54 N75-27760
- CARDIOLOGY**
Development of instantaneous reading tachometer for measuring electrocardiogram signal rate
[NASA-CASE-HFS-20418] c14 N73-24473
Myocardium wall thickness transducer and measuring method
[NASA-CASE-NPO-13644-1] c52 N76-29695
- CARDIOTACHOMETERS**
Digital computing cardiometer
[NASA-CASE-HFS-20284-1] c52 N74-12778
- CARDIOVASCULAR SYSTEM**
Conditioning suit for normal function of astronaut cardiovascular system in gravity environment
[NASA-CASE-XLA-02898] c05 N71-20268
Bar oximeter for monitoring blood oxygenation and pressure, pulse rate, and pressure pulse curve, using dc and ac amplifiers
[NASA-CASE-IAC-05422] c04 N71-23185
Catheter tip force transducer for cardiovascular research
[NASA-CASE-NPO-13643-1] c52 N76-29896
Low X-ray absorption aneurism clips
[NASA-CASE-LAR-12650-1] c52 N81-29768
- CARRIER FREQUENCIES**
Demodulator for simultaneous demodulation of two modulating ac signal carriers close in frequency
[NASA-CASE-XMP-01160] c07 N71-11298
Automatic carrier acquisition system for phase locked loop receiver
[NASA-CASE-NPO-11628-1] c07 N73-30113
Demodulator for carrier transducers
[NASA-CASE-NUC-10107-1] c33 N74-17530
Decision feedback loop for tracking a polyphase modulated carrier
[NASA-CASE-NPO-13103-1] c32 N74-20811
- CARRIER WAVES**
Variable frequency subcarrier oscillator with temperature compensation
[NASA-CASE-XNP-03916] c09 N71-28810
Modulator for tone and binary signals --- phase of modulation of tone and binary signals on carrier waves in communication systems
[NASA-CASE-GSC-11743-1] c32 N75-24981
- CARRIERS**
Sealed storage container for channel carriers with mounted miniature electronic components
[NASA-CASE-HFS-20075] c09 N71-26133
Apparatus for conducting flow electrophoresis in the substantial absence of gravity
[NASA-CASE-HFS-21394-1] c34 N74-27744
- CARTESIAN COORDINATES**
Design and development of random function tracer for obtaining coordinates of points on contour maps
[NASA-CASE-XLA-01401] c15 N71-21179
- CARTRIDGES**
Tape cartridge with high capacity storage of endless-loop magnetic tape
[NASA-CASE-XGS-00769] c14 N70-41647
Endless loop tape transport mechanism for driving and tensioning recording medium in magnetic tape recorder
[NASA-CASE-XGS-01223] c07 N71-10609
Catalyst cartridge for carbon dioxide reduction unit
[NASA-CASE-LAR-10551-1] c25 N74-12813
- CASCADE CONTROL**
Reversible ring counter using cascaded single silicon controlled rectifier stages
[NASA-CASE-XGS-01473] c09 N71-10673
Synchronous dc direct-drive system comprising multiple-loop hybrid control system controlling load directly connected to actuator
[NASA-CASE-GSC-10065-1] c10 N71-27136
Multiloop RC active filter network with low parameter sensitivity and low amplifier gain
[NASA-CASE-ARC-10192] c09 N72-21245
- CASCADE FLOW**
Cascade plug nozzle --- for jet noise reduction
[NASA-CASE-LAR-11674-1] c07 N76-18117
- CASE BONDED PROPELLANTS**
Solid propellant motor
[NASA-CASE-NPO-11458A] c20 N78-32179
- CASES (CONTAINERS)**
Nonmagnetic hermetically sealed battery case made of epoxy resin and woven glass tape for use with electrochemical cells in spacecraft
[NASA-CASE-XGS-00886] c03 N71-11053
Protected isotope heat source --- for atmospheric reentry protection and heat transmission to spacecraft
[NASA-CASE-LEW-11227-1] c73 N75-30876
Portable heatable container
[NASA-CASE-NPO-14237-1] c44 N80-20808
- CASSEGRAIN ANTENNAS**
Cassegrain antenna subreflector flange for suppressing ground noise and increasing antenna transmitting efficiency
[NASA-CASE-XNP-00683] c09 N70-35425
Design and operation of multi-feed cone Cassegrain antenna
[NASA-CASE-NPO-10539] c07 N71-11285
Synchronous detection system for detecting weak radio astronomical signals
[NASA-CASE-XNP-09832] c30 N71-23723
Dual frequency feed systems for Cassegrainian antennas
[NASA-CASE-NPO-13091-1] c09 N73-12214
Low loss dichroic plate
[NASA-CASE-NPO-13171-1] c32 N74-11000
- CASTING**
Hydraulic apparatus for casting and molding of liquid polymers
[NASA-CASE-XNP-07659] c06 N71-22975
Texturing polymer surfaces by transfer casting --- cardiovascular prosthesis
[NASA-CASE-LEW-13120-1] c31 N81-16327
Asymmetric polyimide separation membrane and method
[NASA-CASE-NPO-15431-1] c25 N81-29178
- CASTINGS**
Method of making an apertured casting --- using duplicate mold
[NASA-CASE-LEW-11169-1] c37 N76-23570
Castable high temperature refractory materials
[NASA-CASE-LEW-13080-1] c27 N80-29496
Method of bonding plasticized elastomer to metal and article produced thereby
[NASA-CASE-HFS-25181-1] c27 N81-16238
- CATALYSIS**
Unit for generating thrust from catalytic decomposition of hydrogen peroxide, for high altitude aircraft or spacecraft reaction control
[NASA-CASE-XMS-00583] c28 N70-38504
Apparatus for photon excited catalysis
[NASA-CASE-NPO-13566-1] c25 N77-32255
Start up system for hydrogen generator used with an internal combustion engine
[NASA-CASE-NPO-13849-1] c28 N80-10374
Diesel engine catalytic combustor system --- turbocharging
[NASA-CASE-LEW-12995-1] c37 N80-26659

CATALYSTS

- Catalyst for increased growth of boron carbide crystal whiskers
[NASA-CASE-XHQ-03903] c15 N69-21522
- Catalyst bed element removing tool
[NASA-CASE-XPR-00811] c15 N70-36501
- Catalyst bed ignition system for hydrazine propellants
[NASA-CASE-XNP-0C876] c28 N70-41311
- Development of device for detecting hydrogen in ambient environments
[NASA-CASE-MPS-11537] c14 N71-20442
- Catalyst cartridge for carbon dioxide reduction unit
[NASA-CASE-LAR-10551-1] c25 N74-12813
- Catalysts for polyimide foams from aromatic isocyanates and aromatic dianhydrides --- flame retardant foams
[NASA-CASE-ARC-11107-1] c25 N80-16116

CATHETERIZATION

- Transducer circuit design with single coaxial cable for input and output connections including incorporation into miniaturized catheter transducer
[NASA-CASE-ARC-10132-1] c09 N71-24597
- Catheter tip force transducer for cardiovascular research
[NASA-CASE-NPO-13643-1] c52 N76-29896
- Ion beam sputter-etched ventricular catheter for hydrocephalus shunt
[NASA-CASE-LEW-13107-1] c52 N81-27786

CATHODE RAY TUBES

- Cathode ray oscilloscope for analyzing electrical waveforms representing amplitude distribution of time function
[NASA-CASE-XNP-01383] c09 N71-10659
- Cathode ray tube system for displaying ones and zeros in binary wave train
[NASA-CASE-XGS-04987] c08 N71-20571
- Indexing mechanism for cathode array substitution in electron beam tube
[NASA-CASE-NPO-10625] c09 N71-26182
- Color television system utilizing single gun current sensitive color cathode ray tube
[NASA-CASE-ERC-10098] c09 N71-28618
- Cathode ray tube with coating of phosphor and cobalt oxides
[NASA-CASE-ERC-10468] c09 N72-20206
- Digital video system for displaying image and alphanumeric data on cathode ray tube
[NASA-CASE-NPO-11342] c09 N72-25248
- Switching circuit for control of cathode ray tube beam with fast rise time for output signal
[NASA-CASE-KSC-10647-1] c10 N72-31273
- Situational display system of cathode ray tubes to assist pilot in aircraft control
[NASA-CASE-ERC-10350] c14 N73-20474
- Very high intensity light source using a cathode ray tube --- electron beams
[NASA-CASE-XNP-01296] c33 N75-27250

CATHODES

- Encapsulated heater forming hollow body for cathode used in ion thruster
[NASA-CASE-LEW-10814-1] c28 N70-35422
- Electronic cathodes for use in electron bombardment ion thrusters
[NASA-CASE-XLE-04501] c09 N71-23190
- Design and characteristics of heat activated electric cell with anode made from one or more alkali metals and cathode made from oxidizing material
[NASA-CASE-LEW-11358] c03 N71-26684
- Characteristics of ion rocket engine with combination keeper electrode and electron baffle
[NASA-CASE-NPO-11880] c28 N73-24783
- Storage battery comprising negative plates of a wedge shaped configuration --- for preventing shape change induced malfunctions
[NASA-CASE-NPO-11806-1] c44 N74-19693

CATIONS

- Water insoluble, cationic permselective membrane
[NASA-CASE-NPO-11091] c18 N72-22567
- Viscoelastic cationic polymers containing the urethane linkage
[NASA-CASE-NPO-10830-1] c27 N81-15104

CAVITATION FLOW

- Semitoroidal diaphragm cavitating flow control valve
[NASA-CASE-XNP-C5704] c12 N71-18615

CAVITIES

- Black body radiometer having isothermally surrounded cavity for ultraviolet, visible, and infrared radiation
[NASA-CASE-NPO-10810] c14 N71-27323
- Method for coating through-holes in ceramic substrates used in fabricating miniaturized electronic circuits
[NASA-CASE-XNP-05999] c15 N71-29032
- Soil burrowing mole apparatus
[NASA-CASE-XNP-07169] c15 N73-32362
- Method of constructing dished ion thruster grids to provide hole array spacing compensation
[NASA-CASE-LEW-11876-1] c20 N76-21276
- Method of making hollow elastomeric bodies
[NASA-CASE-NPO-13535-1] c37 N76-31524
- Method and apparatus for producing concentric hollow spheres --- inertial confinement fusion targets
[NASA-CASE-NPO-14596-1] c31 N81-33319

CAVITY RESONATORS

- Helical coaxial resonator RF filter
[NASA-CASE-XGS-02816] c07 N69-24323
- Semiconductor in resonant cavity for improving signal to noise ratio of communication receiver
[NASA-CASE-MSC-12259-1] c07 N70-12616
- Thermally sensitive tuning probe for nullifying detuning effects in microwave cavity resonator of amplifier
[NASA-CASE-XNP-00449] c14 N70-35220
- Holder for high frequency crystal resonators
[NASA-CASE-XNP-03637] c15 N71-21311
- Superconductive resonant cavity for improved signal to noise ratio in communication signal
[NASA-CASE-MSC-12259-2] c07 N72-33146
- Infrared tunable dye laser with nonlinear wavelength mixing crystal in optical cavity
[NASA-CASE-ARC-10463-1] c09 N73-32111
- Tunable cavity resonator with ramp shaped supports
[NASA-CASE-HQN-10790-1] c36 N74-11313
- Laser apparatus
[NASA-CASE-GSC-12237-1] c36 N80-14384
- Off-axis coherently pumped laser
[NASA-CASE-GSC-12592-1] c36 N81-12407

CELESTIAL BODIES

- Device for determining relative angular position of spacecraft and radiating celestial body
[NASA-CASE-GSC-11444-1] c14 N73-28490
- Position determination systems --- using orbital antenna scan of celestial bodies
[NASA-CASE-MSC-12593-1] c17 N76-21250

CELESTIAL NAVIGATION

- Development of star intensity measuring system which minimizes effects of outside interference
[NASA-CASE-XNP-06510] c14 N71-23797

CELL ANODES

- Heat activated emf cells with aluminum anode
[NASA-CASE-LEW-11359] c03 N71-28579
- Heat activated cell with aluminum anode
[NASA-CASE-LEW-11359-2] c03 N72-20034
- Electrically rechargeable REDOX flow cell
[NASA-CASE-LEW-12220-1] c44 N77-14581

CELL DIVISION

- Process for control of cell division
[NASA-CASE-LAR-10773-3] c51 N77-25769

CELLS

- Separation cell with permeable membranes for fluid mixture component separation
[NASA-CASE-XMS-02952] c18 N71-20742

CELLS (BIOLOGY)

- System for and method of freezing biological tissue
[NASA-CASE-GSC-12173-1] c51 N79-10694
- Method for separating biological cells --- suspended in aqueous polymer systems
[NASA-CASE-MPS-23883-1] c51 N80-16715
- Electrophoresis device
[NASA-CASE-MPS-25426-1] c25 N81-29179

CENTRAL PROCESSING UNITS

- Massively parallel processor computer
[NASA-CASE-GSC-12223-1] c60 N79-27864

CENTRIFUGAL COMPRESSORS

- Centrifugal-reciprocating compressor
[NASA-CASE-NPO-14597-1] c37 N79-23431

CENTRIFUGAL FORCE

- Counter pumping debris excluder and separator --- gas turbine shaft seals
[NASA-CASE-LEW-11855-1] c07 N78-25090

CENTRIFUGES

Centrifuge mounted motion simulator with elevator mechanism
[NASA-CASE-XAC-00399] c11 N70-34815
Liquid-gaseous centrifugal separator for weightlessness environment
[NASA-CASE-XLA-00415] c15 N71-16079
Centrifugal lyophobic separator
[NASA-CASE-LAR-10194-1] c34 N74-30608
Fluid control apparatus and method
[NASA-CASE-LAR-11110-1] c34 N75-26282
Biocentrifuge system capable of exchanging specimen cages while in operational mode
[NASA-CASE-MFS-23825-1] c51 N81-32829

CERAMIC BONDING

Plasma spraying gun for forming diffusion bonded metal or ceramic coatings on substrates
[NASA-CASE-XLE-01604-2] c15 N71-15610
Method of forming ceramic to metal seals impervious to gaseous and liquid mercury at high temperature
[NASA-CASE-XNP-01263-2] c15 N71-26312

CERAMIC COATINGS

Evaporating crucible of tantalum-tungsten foil, nickel alumina bonding agent, and ceramic coating
[NASA-CASE-XLA-03105] c15 N69-27483
Unfired-ceramic, highly reflective composite insulation for large launch vehicles
[NASA-CASE-XMF-01030] c18 N70-41583
Unfired ceramic insulation for protection from radiant heating environments
[NASA-CASE-MFS-14253] c33 N71-24858
Cermet for nuclear fuel constructed by pressing metal coated ceramic particles in die at temperature to cause bonding of metal coatings, and tested for thermal stability
[NASA-CASE-LEW-10219-1] c18 N71-28729
Two-component ceramic coating for silica insulation
[NASA-CASE-MSC-14270-1] c27 N76-22377
Three-component ceramic coating for silica insulation
[NASA-CASE-MSC-14270-2] c27 N76-23426
Spray coating apparatus having a rotatable workpiece holder
[NASA-CASE-ARC-11110-1] c37 N78-32434
Laser surface fusion of plasma sprayed ceramic turbine seals
[NASA-CASE-LEW-13269-1] c27 N81-22190
Thermal barrier coating system having improved adhesion
[NASA-CASE-LEW-13359-1] c27 N81-24265

CERAMIC NUCLEAR FUELS

Cermet for nuclear fuel constructed by pressing metal coated ceramic particles in die at temperature to cause bonding of metal coatings, and tested for thermal stability
[NASA-CASE-LEW-10219-1] c18 N71-28729

CERAMICS

Transpiration cooled turbine blade made from metallic or ceramic wires
[NASA-CASE-XLE-00020] c15 N70-33226
Characteristics of foamed-in-place ceramic refractory insulating material and method of fabrication
[NASA-CASE-XGS-02435] c18 N71-22998
Process for fiberizing ceramic materials with high fusion temperatures and tensile strength
[NASA-CASE-XNP-00597] c18 N71-23088
Method for coating through-holes in ceramic substrates used in fabricating miniaturized electronic circuits
[NASA-CASE-XMF-05999] c15 N71-29032
Extrusion can for extruding ceramics under heat and pressure
[NASA-CASE-NPO-10812] c15 N73-13464
Thermal shock resistant hafnia ceramic materials
[NASA-CASE-LAR-10894-1] c18 N73-14584
Thermal shock and erosion resistant tantalum carbide ceramic material
[NASA-CASE-LAR-11902-1] c27 N78-17206
High temperature resistant cermet and ceramic compositions --- for thermal resistant insulators and refractory coatings
[NASA-CASE-NPO-13690-1] c27 N78-19302
Thermal insulation attaching means --- adhesive bonding of felt vibration insulators under ceramic tiles

[NASA-CASE-MSC-12619-2] c27 N79-12221
High temperature resistant cermet and ceramic compositions
[NASA-CASE-NPO-13690-2] c27 N79-14213
Inorganic spark chamber frame and method of making the same
[NASA-CASE-GSC-12354-1] c35 N80-20565
Fully plasma-sprayed compliant backed ceramic turbine seal
[NASA-CASE-LEW-13268-1] c37 N80-24619
Castable high temperature refractory materials
[NASA-CASE-LEW-13080-1] c27 N80-29496
Apparatus for accurately preloading auger attachment means for frangible protective material
[NASA-CASE-MSC-18791-1] c37 N81-24446
Sandblasting nozzle
[NASA-CASE-NPO-13823-1] c37 N81-25371

CEREBROSPINAL FLUID

Ion beam sputter-etched ventricular catheter for hydrocephalus shunt
[NASA-CASE-LEW-13107-1] c52 N81-27786

CERMETS

Freeze casting of metal ceramic and refractory compound powders into plastic slips
[NASA-CASE-XLE-00106] c15 N71-16076
Cermet for nuclear fuel constructed by pressing metal coated ceramic particles in die at temperature to cause bonding of metal coatings, and tested for thermal stability
[NASA-CASE-LEW-10219-1] c18 N71-28729
Cermet composition and method of fabrication --- heat resistant alloys and powders
[NASA-CASE-NPO-13120-1] c27 N76-15311
High temperature oxidation resistant cermet compositions
[NASA-CASE-NPO-13666-1] c27 N77-13217
High temperature resistant cermet and ceramic compositions --- for thermal resistant insulators and refractory coatings
[NASA-CASE-NPO-13690-1] c27 N78-19302
High temperature resistant cermet and ceramic compositions
[NASA-CASE-NPO-13690-2] c27 N79-14213

CESIUM

Heated tungsten filter for removing oxygen impurities from cesium
[NASA-CASE-XNE-04262-2] c17 N71-26773
Method of producing I-123 --- by bombardment of cesium causing spallation
[NASA-CASE-LEW-11390-2] c25 N76-27383

CESIUM DIODES

Oxygen-doped tantalum emitter for thermionic devices such as cesium vapor diodes
[NASA-CASE-NPO-11138] c03 N70-34646
Thermionic cesium diode converter with cavity emitters
[NASA-CASE-NFO-10412] c09 N71-28421
Improved thermionic energy converters
[NASA-CASE-LEW-12443-1] c44 N81-19561

CESIUM ENGINES

Variable thrust ion engine using thermal decomposition of solid cesium compound to produce propulsive vapor
[NASA-CASE-XMF-00923] c28 N70-36802
Method for producing porous tungsten plates for ionizing cesium compounds for propulsion of ion engines
[NASA-CASE-XLE-00455] c28 N70-38197

CESIUM VAPOR

Electric power generation system directory from laser power
[NASA-CASE-NFO-13308-1] c36 N75-30524
Cesium thermionic converters having improved electrodes
[NASA-CASE-LEW-12038-3] c44 N78-25555

CHANNEL FLOW

Fabrication method for lightweight regeneratively cooled combustion chamber of channel construction
[NASA-CASE-XLE-00150] c28 N70-41818
Heated element sensor for fluid flow detection in thermal conductive conduit with adaptive means to determine flow rate and direction
[NASA-CASE-MSC-12084-1] c12 N71-17569

CHANNELS (DATA TRANSMISSION)

Error correction circuitry for binary signal channels
[NASA-CASE-XNP-03263] c09 N71-18843

- Helical recorder for multiple channel recording
[NASA-CASE-GSC-10614-1] c09 N72-11224
- Asynchronous, multiplexing, single line
transmission and recovery data system --- for
satellite use
[NASA-CASE-NPO-13321-1] c32 N75-26195
- Massively parallel processor computer
[NASA-CASE-GSC-12223-1] c60 N79-27864
- High-speed data link for moderate distances and
noisy environments
[NASA-CASE-NPO-14152-1] c32 N80-18252
- CHARACTER RECOGNITION**
- Automatic character skew and spacing checking
network --- of digital tape drive systems
[NASA-CASE-GSC-11925-1] c33 N76-18353
- System and method for character recognition
[NASA-CASE-NPO-11337-1] c74 N81-19896
- CHARGE COUPLED DEVICES**
- CCD correlated quadruple sampling processor
[NASA-CASE-NPO-14426-1] c33 N79-17134
- Multispectral imaging and analysis system ---
using charge coupled devices and linear arrays
[NASA-CASE-NPO-13691-1] c43 N79-17288
- CCD correlated quadruple sampling processor
[NASA-CASE-NPO-14426-1] c33 N81-27396
- Programmable scan/read circuitry for charge
coupled device imaging detectors --- for a
startracker
[NASA-CASE-NPO-15345-1] c33 N81-27403
- CHARGE DISTRIBUTION**
- Operation of vidicon tube for scanning spatial
charge density pattern
[NASA-CASE-XNP-06028] c09 N71-23189
- Charge storage diode modulators and demodulators
[NASA-CASE-NPO-10189-1] c33 N77-21314
- Charge injection method and apparatus of
producing large area electrets
[NASA-CASE-MFS-23186-2] c24 N78-25137
- CHARGE EXCHANGE**
- Ion beam thruster shield
[NASA-CASE-LEW-12082-1] c20 N77-10148
- CHARGE TRANSFER**
- Electronic counter circuit utilizing magnetic
core and low power consumption
[NASA-CASE-XNP-08836] c09 N71-12515
- Pressure transducer --- using a monomeric charge
transfer complex sensor
[NASA-CASE-NPO-11150] c35 N78-17359
- CHARGE TRANSFER DEVICES**
- Charge transfer reaction laser with
preionization means
[NASA-CASE-NPO-13945-1] c36 N78-27402
- An image readout device with electrically
variable spatial resolution
[NASA-CASE-LAR-12633-1] c35 N80-22661
- Time delay and integration detectors using
charge transfer devices
[NASA-CASE-GSC-12324-1] c33 N81-33403
- CHARGED PARTICLES**
- Method of forming thin window drifted silicon
charged particle detector
[NASA-CASE-XLE-00808] c24 N71-10560
- Charged particle analyzer with periodically
varying voltage applied across electrostatic
deflection members
[NASA-CASE-XAC-05506-1] c24 N71-16095
- Electrostatic charged particle collector
containing stacked electrodes for microwave tube
[NASA-CASE-LEW-11192-1] c09 N73-13208
- Method and apparatus for neutralizing potentials
induced on spacecraft surfaces
[NASA-CASE-GSC-11963-1] c33 N77-10429
- CHARGING**
- Development of device for simulating charge and
discharge cycle of battery in synchronous orbit
[NASA-CASE-GSC-11211-1] c03 N72-25020
- CHARRING**
- Sensor device with switches for measuring
surface recession of charring and noncharring
ablaters
[NASA-CASE-XLA-01781] c14 N69-39975
- Ablation sensor for measuring char layer
recession rate using electric wires
[NASA-CASE-XLA-01794] c33 N71-21586
- CHASSIS**
- Chassis unit insert tightening-extract device
[NASA-CASE-XMS-01077-1] c37 N79-33467
- CHECKOUT**
- Digital computer system for automatic prelaunch
checkout of spacecraft
[NASA-CASE-XKS-08012-2] c31 N71-15566
- Rapid activation and checkout device for batteries
[NASA-CASE-MFS-22749-1] c44 N76-14601
- Decommutator patchboard verifier
[NASA-CASE-KSC-11065-1] c33 N81-26359
- CHELATES**
- Ammonium perchlorate composite propellant with
organic Cu/II/ chelate catalytic additive
[NASA-CASE-LAR-10173-1] c27 N71-14090
- Chelate-modified polymers for atmospheric gas
chromatography
[NASA-CASE-ABC-11154-1] c25 N80-23383
- CHEMICAL ANALYSIS**
- Analytical test apparatus and method for
determining oxygen content in alkali liquid
metal
[NASA-CASE-XLE-01997] c06 N71-23527
- Automated fluid chemical analyzer for
microchemical analysis of small quantities of
liquids by use of selected reagents and
analyzer units
[NASA-CASE-XNP-09451] c06 N71-26754
- Method for determining presence and type of OH
in MgO
[NASA-CASE-NFO-10774] c06 N72-17095
- Micrometeoroid analyzer using arrays of
interconnected capacitors and ion detector
[NASA-CASE-ABC-10443-1] c14 N73-20477
- Chromato-fluorographic drug detector --- device
for detecting and recording fluorescent
properties of materials
[NASA-CASE-ABC-10633-1] c25 N74-26947
- Amino acid analysis
[NASA-CASE-NPO-12130-1] c25 N75-14844
- Gas chromatograph injection system
[NASA-CASE-ABC-10344-2] c35 N75-26334
- System for monitoring physical characteristics
of fluids --- acoustic techniques
[NASA-CASE-NPO-15400-1] c34 N81-24384
- CHEMICAL AUXILIARY POWER UNITS**
- Development and characteristics of ion-exchange
membrane and electrode assembly for fuel cells
or electrolysis cells
[NASA-CASE-XMS-02063] c03 N71-29044
- CHEMICAL BONDS**
- Fluorine-containing polyformals
[NASA-CASE-XNP-06900-1] c27 N79-21191
- Preparation of perfluorinated 1,2,4-oxadiazoles
--- heat and chemical resistant polymers
[NASA-CASE-ABC-11267-2] c25 N80-26407
- Perfluoroalkyl polytriazines containing pendent
iododifluoromethyl groups
[NASA-CASE-ABC-11241-1] c25 N81-14016
- CHEMICAL COMPOSITION**
- Phototropic composition of matter with
sensitivity to ultraviolet light and usable
for producing positive photographic images
[NASA-CASE-XGS-03736] c14 N72-22443
- Nitramine propellants --- gun propellant burning
rate
[NASA-CASE-NPO-14103-1] c28 N78-31255
- Composition and method for making polyimide
resin-reinforced fabric
[NASA-CASE-LEW-12933-1] c27 N81-19296
- CHEMICAL COMPOUNDS**
- Ultraviolet chromatographic detector for
quantitative and qualitative analysis of
compounds
[NASA-CASE-HQN-10756-1] c14 N72-25428
- CHEMICAL ELEMENTS**
- Apparatus for remote handling of materials ---
mixing or analyzing dangerous chemicals
[NASA-CASE-LAR-10634-1] c37 N74-18123
- CHEMICAL ENGINEERING**
- Process for the preparation of calcium superoxide
[NASA-CASE-ABC-11053-1] c25 N79-10162
- CHEMICAL EXPLOSIONS**
- Hypervelocity gun --- using both electric and
chemical energy for projectile propulsion
[NASA-CASE-XLE-03186-1] c09 N79-21084
- CHEMICAL MACHINING**
- Reusable masking boot for chemical machining
operations
[NASA-CASE-XNP-02092] c15 N70-42033
- CHEMICAL PROPERTIES**
- Method for producing alternating ether-siloxane
copolymers with stable properties when exposed
to elevated temperatures and UV radiation

- [NASA-CASE-XMF-02584] c06 N71-20905
 Chemical and physical properties of synthetic
 polyurethane polymer prepared by reacting
 hydroxy carbonate with organic diisocyanate
 [NASA-CASE-MFS-10512] c06 N73-30C99
 Chemical and elastic properties of fluorinated
 polyurethanes
 [NASA-CASE-NFO-10767-1] c06 N73-33076
 Thiophenyl ether disiloxanes and trisiloxanes
 useful as lubricant fluids
 [NASA-CASE-MFS-22411-1] c37 N74-21058

CHEMICAL REACTIONS

- Process for interfacial polymerization of
 pyromellitic dianhydride and tetraamino benzene
 [NASA-CASE-XLA-03104] c06 N71-11235
 Synthesis of polymeric schiff bases by
 schiff-base exchange reactions
 [NASA-CASE-XMF-08651] c06 N71-11236
 Preparation of ordered poly/arylenesiloxane/
 polymers
 [NASA-CASE-XMF-10753] c06 N71-11237
 Synthesis and chemical properties of
 imidazopyrrolone/imide copolymers
 [NASA-CASE-XLA-08802] c06 N71-11238
 Composition and process for improving definition
 of resin masks used in chemical etching
 [NASA-CASE-XGS-04993] c14 N71-17574
 Preparation of inorganic solid film lubricants
 with long wear life and stability in aerospace
 environments
 [NASA-CASE-XMF-03988] c15 N71-21403
 Synthesis of high purity dianilinosilanes
 [NASA-CASE-XMF-06409] c06 N71-23230
 Synthesis of aromatic diamines and dialdehyde
 polymers using Schiff base
 [NASA-CASE-XMF-03074] c06 N71-24740
 Chemical synthesis of hydroxy terminated
 perfluoro ethers as intermediates for highly
 fluorinated polyurethane resins
 [NASA-CASE-NPO-10768] c06 N71-27254
 Chemical synthesis of thermally stable
 organometallic polymers with divalent metal
 ion and tetraphenylphosphonitrilic units
 [NASA-CASE-HQB-10364] c06 N71-27363
 Apparatus and process for volumetrically
 dispensing reagent quantities of volatile
 chemicals for small batch reactions
 [NASA-CASE-NPO-10070] c15 N71-27372
 Infusible polymer production from reaction of
 polyfunctional epoxy resins with
 polyfunctional aziridine compounds
 [NASA-CASE-NPO-10701] c06 N71-28620
 Process for preparing high molecular weight
 polyaryloxysilanes from lower molecular weight
 forms
 [NASA-CASE-XMF-08674] c06 N71-28807
 Organometallic compounds of niobium and tantalum
 useful for film deposition
 [NASA-CASE-XNP-04023] c06 N71-28808
 Description of method for making homogeneous
 foamed materials in weightless environment
 using materials having different physical
 properties
 [NASA-CASE-XMF-09902] c15 N72-11387
 Method to produce high purity copper fluoride by
 heating copper hydroxyfluoride powder and
 subjecting to flowing fluorine gas
 [NASA-CASE-LEW-10794-1] c06 N72-17C93
 Pumping and metering dual piston system and
 monitor for reaction chamber constituents
 [NASA-CASE-GSC-10218-1] c15 N72-21465
 Development of apparatus for producing metal
 powder particles of controlled size
 [NASA-CASE-XLE-06461-2] c17 N72-28535
 Chemical spot tests for identification of
 titanium and titanium alloys used in aerospace
 vehicles
 [NASA-CASE-LAR-10539-1] c17 N73-12547
 Self-cycling fluid heater for heating continuous
 fluid stream to ultrahigh temperatures to
 facilitate chemical reactions
 [NASA-CASE-MSC-15567-1] c33 N73-16518
 Chemical process for production of
 polyisobutylene compounds and application as
 solid rocket propellant binder
 [NASA-CASE-NPO-10893] c27 N73-22710
 Preparation of stable polyurethane polymer by
 reacting polymer with diisocyanate
 [NASA-CASE-MFS-10506] c06 N73-30100

- Preparation of polyurethane polymer by reacting
 hydroxy polyformal with organic diisocyanate
 [NASA-CASE-MFS-10509] c06 N73-30103
 Utilization of lithium p-lithiophenoxide to
 prepare star polymers
 [NASA-CASE-NPO-10998-1] c06 N73-32029
 Polyimide foam for the thermal insulation and
 fire protection
 [NASA-CASE-ARC-10464-1] c27 N74-12812
 Intumescent composition, foamed product prepared
 therewith and process for making same
 [NASA-CASE-ARC-10304-2] c27 N74-27037
 Vapor phase growth of groups 3-5 compounds by
 hydrogen chloride transport of the elements
 [NASA-CASE-LAB-11144-1] c25 N75-26043
 Utilization of oxygen difluoride for syntheses
 of fluoropolymers
 [NASA-CASE-NFO-12061-1] c27 N76-16228
 Method for detecting pollutants --- through
 chemical reactions and heat treatment
 [NASA-CASE-LAR-11405-1] c45 N76-31714
 Process for preparing higher oxides of the
 alkali and alkaline earth metals
 [NASA-CASE-ARC-10992-1] c26 N78-32229
 An improved synthesis of 2, 4, 8,
 10-tetroxaspiro (5.5)undecane
 [NASA-CASE-ARC-11243-1] c27 N79-30375
 Improved synthesis of polyformals
 [NASA-CASE-ARC-11244-1] c27 N79-30376
 Preparation of perfluorinated imidoylamidoximes
 --- for eventual preparation of heat and
 chemical resistant polymers
 [NASA-CASE-ARC-11267-1] c23 N80-26386
 Preparation of perfluorinated 1,2,4-oxadiazoles
 --- heat and chemical resistant polymers
 [NASA-CASE-ARC-11267-2] c25 N80-26407
 Low temperature cross linking polyimides
 [NASA-CASE-LEW-12876-1] c27 N80-26447
 An improved synthesis of 2,4,8,10-tetroxaspiro
 (5.5) undecane
 [NASA-CASE-ARC-11243-2] c23 N80-31472
 Method for preparing addition type polyimide
 prepreps
 [NASA-CASE-LAR-12054-2] c27 N81-14078
- CHEMICAL REACTORS**
 Chemical vapor deposition reactor --- providing
 uniform film thickness
 [NASA-CASE-NPO-13650-1] c25 N79-28253
 Sodium storage and injection system
 [NASA-CASE-NPO-14384-1] c37 N80-10494
 Method of producing silicon --- gas phase
 reactor multiple injector liquid feed system
 [NASA-CASE-NPO-14382-1] c31 N80-18231
 Thermal reactor and process --- liquid silicon
 production from silane
 [NASA-CASE-NPO-14369-1] c25 N80-20338
 Solar-heated fluidized bed gasification system
 [NASA-CASE-NPO-15071-1] c44 N80-24747
- CHEMICAL TESTS**
 Chemical spot tests for identification of
 titanium and titanium alloys used in aerospace
 vehicles
 [NASA-CASE-LAR-10539-1] c17 N73-12547
 Chemical spot test for identifying magnesium or
 magnesium alloys used in aerospace applications
 [NASA-CASE-LAR-10953-1] c17 N73-27446
- CHEMILUMINESCENCE**
 Method and apparatus for eliminating luminol
 interference material
 [NASA-CASE-MSC-16260-1] c51 N80-16714
- CHEMOTHERAPY**
 Indomethacin-antihistamine combination for
 gastric ulceration control
 [NASA-CASE-ARC-11118-2] c52 N81-14613
- CHIPS**
 Liquid immersion apparatus for minute articles
 [NASA-CASE-MFS-25363-1] c31 N80-32585
- CHIPS (ELECTRONICS)**
 Head for high speed spinner having a vacuum chuck
 --- holding silicon dioxide chips for etching
 [NASA-CASE-NPO-15227-1] c37 N81-33882
- CHIRP SIGNALS**
 Method for shaping and aiming narrow beams ---
 using a linear frequency chirp for sonar
 reception
 [NASA-CASE-NPO-14632-1] c32 N80-12256
- CHLORINATION**
 Chlorine generator for purifying water in life
 support systems of manned spacecraft

- [NASA-CASE-XLA-08913] c14 N71-28933
- CHLOROPRENE RESINS**
- Flexible fire retardant polyisocyanate modified neoprene foam --- for thermal protective devices [NASA-CASE-ARC-10180-1] c27 N74-12814
- CHOKES**
- Current dependent variable inductance for input filter chokes of ac or dc power supplies [NASA-CASE-ERC-10139] c09 N72-17154
- CHOKES (RESTRICTIONS)**
- Variably positioned guide vanes for aerodynamic choking [NASA-CASE-LAR-10642-1] c07 N74-31270
- CHOLESTEROL**
- Reduction of blood serum cholesterol [NASA-CASE-NPO-12119-1] c52 N75-15270
- CHROMATOGRAPHY**
- Chromato-fluorographic drug detector --- device for detecting and recording fluorescent properties of materials [NASA-CASE-ARC-10633-1] c25 N74-26547
- CHROMIUM**
- Selective coating for solar panels --- using black chrome and black nickel [NASA-CASE-LEW-12159-1] c44 N78-19599
- Improving the efficiency of silicon solar cells containing chromium [NASA-CASE-NPO-15179-1] c44 N80-32850
- CHROMIUM ALLOYS**
- Method of heat treating age-hardenable alloys [NASA-CASE-XNP-01311] c26 N75-29236
- Nickel ternary alloy having improved cyclic oxidation resistance [NASA-CASE-LEW-13339-1] c26 N81-12211
- CHROMOSOMES**
- Automated clinical system for chromosome analysis [NASA-CASE-NPO-13913-1] c52 N79-12694
- CINEMATOGRAPHY**
- High speed photo-optical time recorder for indicating time at exposure of each frame of high speed movie camera film [NASA-CASE-KSC-10294] c14 N72-18411
- Holographic motion picture camera with Doppler shift compensation [NASA-CASE-MFS-22517-1] c35 N76-18402
- CIRCUIT BOARDS**
- Electrical feedthrough connection for printed circuit boards [NASA-CASE-XNP-01483] c14 N69-27431
- Electric connector for printed cable to printed cable or to printed board [NASA-CASE-XNP-00369] c09 N70-36494
- Electrical connection for printed circuits on common board, using bellows principle in rivet [NASA-CASE-XNP-05082] c15 N70-41560
- Electrical spot terminal assembly for printed circuit boards [NASA-CASE-NPO-10034] c15 N71-17685
- Development and characteristics of polyimide impregnated laminates with fiberglass cloth backing for application as printed circuit boards [NASA-CASE-MFS-20408] c18 N73-12604
- Techniques for packaging and mounting printed circuit boards [NASA-CASE-MFS-21919-1] c10 N73-25243
- Tool for use in lifting pin supported objects [NASA-CASE-NPO-13157-1] c37 N74-32918
- Shock absorbing mount for electrical components [NASA-CASE-NPO-13253-1] c37 N75-18573
- Connector --- for connecting circuits on different layers of multilayer printed circuit boards [NASA-CASE-LAR-11769-1] c37 N76-27567
- Traveling wave tube circuit [NASA-CASE-LEW-12013-1] c33 N79-10339
- CIRCUIT BREAKERS**
- Interrupter switching device utilizing electrodes and mercury filled capillary tubes in which current flow vaporizes mercury as circuit breaker [NASA-CASE-XNP-02251] c12 N71-20896
- Single electrical circuit component combining diode, fuse, and blown indicator with elongated tube of heat resistant transparent material [NASA-CASE-XKS-03381] c09 N71-22796
- Electrical circuit selection device for simulating stage separation of flight vehicle [NASA-CASE-XKS-04631] c10 N71-23663
- Electromagnetic braking arrangement for controlling rotor rotation in electric motor [NASA-CASE-XNP-06936] c15 N71-24695
- Relay circuit breaker with magnetic latching to provide conductive and nonconductive paths for current devices [NASA-CASE-MSC-11277] c09 N71-29008
- Multiple circuit protector device [NASA-CASE-XNS-02744] c33 N75-27249
- CIRCUIT DIAGRAMS**
- Excitation and detection circuitry for flux responsive magnetic head [NASA-CASE-XNP-04183] c09 N69-24329
- Impedance transformation device for signal mixing [NASA-CASE-IGS-01110] c07 N69-24334
- Design of transistorized ring counter circuit with special steering and triggering circuits [NASA-CASE-IGS-03095] c09 N69-27463
- Solid state switching circuit design to increase current capacity of low rated relay contacts [NASA-CASE-XNP-09228] c09 N69-27500
- Extra-long monostable multivibrator employing bistable semiconductor switch to allow charging of timing circuit [NASA-CASE-IGS-00381] c09 N70-34819
- Frequency shift keyed demodulator - circuit diagrams [NASA-CASE-IGS-02889] c07 N71-11282
- Difference indicating circuit used in conjunction with device measuring gravitational fields [NASA-CASE-XNP-08274] c10 N71-13537
- High voltage transistor circuit [NASA-CASE-XNP-06937] c09 N71-19516
- Control of fusion welding through use of thermocouple wire [NASA-CASE-MFS-06074] c15 N71-20393
- Circuitry for developing autocorrelation function continuously within signal receiving period [NASA-CASE-XNP-00746] c07 N71-21476
- Single electrical circuit component combining diode, fuse, and blown indicator with elongated tube of heat resistant transparent material [NASA-CASE-XKS-03381] c09 N71-22796
- Design and development of buck-boost voltage regulator circuit with additive or subtractive alternating current impressed on variable direct current source voltage [NASA-CASE-GSC-10735-1] c10 N71-26085
- Design of active RC network capable of operating at high Q values with reduced sensitivity to gain amplification and number of passive components [NASA-CASE-ARC-10042-2] c10 N72-11256
- Precision surface cutter for screen circuit negatives and other microcircuits [NASA-CASE-XLA-09843] c15 N72-27485
- Self-regulating proportionally controlled heating apparatus and technique [NASA-CASE-GSC-11752-1] c77 N75-20140
- Symmetrical odd-modulus frequency divider [NASA-CASE-NPO-13426-1] c33 N75-31330
- Trielectrode capacitive pressure transducer [NASA-CASE-ARC-10711-2] c33 N76-21390
- Frequency discriminator and phase detector circuit [NASA-CASE-NPO-11515-1] c33 N77-13315
- CIRCUIT PROTECTION**
- Use of silicon controlled rectifier shorting circuit to protect thermoelectric generator source from thermal destruction [NASA-CASE-IGS-04808] c03 N69-25146
- Spark gap type protective circuit for fast sensing and removal of overvoltage conditions [NASA-CASE-XAC-08981] c09 N69-39897
- Development of in-line fuse device for protection of electric circuits from excessive currents and voltages [NASA-CASE-MSC-12135-1] c09 N71-12526
- Overcurrent protecting circuit for push-pull transistor amplifiers [NASA-CASE-MSC-12033-1] c09 N71-13531
- Solder coating process for printed copper circuit protection [NASA-CASE-XNP-01599] c09 N71-20705
- Power supply with overload protection for series stage transistor

[NASA-CASE-XMS-00913] c10 N71-23543
 Selective plating of etched circuits without removing previous plating
 [NASA-CASE-XGS-03120] c15 N71-24047
 Circuit design for failure sensing and protecting low voltage electric generator and power transmission networks
 [NASA-CASE-GSC-10114-1] c10 N71-27366
 Sensing circuit for instantaneous reaction to power overloads
 [NASA-CASE-GSC-10667-1] c10 N71-33129
 Current protection equipment for saturable core transformers
 [NASA-CASE-ERC-10075-2] c09 N72-22196
 Development of process for forming insulating layer between two electrical conductor or semiconductor materials
 [NASA-CASE-LEW-10489-1] c15 N72-25447
 Phase protection system for ac power lines
 [NASA-CASE-MSC-17832-1] c33 N74-14956
 Overvoltage protection network
 [NASA-CASE-ARC-10197-1] c33 N74-17929
 Shock absorbing mount for electrical components
 [NASA-CASE-NPO-13253-1] c37 N75-18573
 Multiple circuit protector device
 [NASA-CASE-XMS-02744] c33 N75-27249
 Multi-cell battery protection system
 [NASA-CASE-LEW-12039-1] c44 N78-14625
 Fused switch
 [NASA-CASE-XMS-01244-1] c33 N79-33393
 Base drive for paralleled inverter systems
 [NASA-CASE-NPO-14163-1] c33 N81-14220
 Shielded conductor cable system
 [NASA-CASE-MSC-12745-1] c33 N81-27397
 Push-pull converter with energy saving circuit for protecting switching transistors from peak power stress
 [NASA-CASE-NPO-14316-1] c33 N81-33404

CIRCUITS
 Distribution of currents to circuits using electrical adaptor
 [NASA-CASE-XLA-01288] c09 N69-21470
 Nondestructive interrogating and state changing circuit for binary magnetic storage elements
 [NASA-CASE-XGS-00174] c08 N70-34743
 Electronic circuit system for controlling electric motor speed
 [NASA-CASE-XMF-01129] c09 N70-38712
 Starting circuit design for initiating and maintaining arcs in vapor lamps
 [NASA-CASE-XNP-01058] c09 N71-12540
 Voltage drift compensation circuit for analog-to-digital converter
 [NASA-CASE-XNP-04780] c08 N71-19687
 High voltage divider system for attenuating high voltages to convenient levels suitable for introduction to measuring circuits
 [NASA-CASE-XLE-02008] c09 N71-21583
 Negation of magnetic fields produced by thin waferlike circuit elements in space vehicles
 [NASA-CASE-XGS-03390] c03 N71-23187
 Circuits for controlling reversible dc motor
 [NASA-CASE-XNP-07477] c09 N71-26092
 Device for rapid adjustment and maintenance of temperature in electronic components
 [NASA-CASE-XNP-02792] c14 N71-28958
 Pulse generating circuit for operation at very high duty cycles and repetition rates
 [NASA-CASE-XNP-00745] c10 N71-28960
 Development of electric circuit for production of different pulse width signals
 [NASA-CASE-XLA-07788] c09 N71-29139
 Sensing circuit for instantaneous reaction to power overloads
 [NASA-CASE-GSC-10667-1] c10 N71-33129
 Pulsed excitation voltage circuit for strain gage bridge transducers
 [NASA-CASE-FRC-10036] c09 N72-22200
 Development of thermal to electric power conversion system using solid state switches of electrical currents to load for Seebeck effect compensation
 [NASA-CASE-NPO-11388] c03 N72-23048
 Inductive-capacitive loops as load insensitive power converters
 [NASA-CASE-ERC-10268] c09 N72-25252
 Fail-safe multiple transformer circuit configuration
 [NASA-CASE-NPO-11078] c09 N72-25262

Precision surface cutter for screen circuit negatives and other microcircuits
 [NASA-CASE-XLA-09843] c15 N72-27485
 Bridge-type gain control circuit
 [NASA-CASE-GSC-10786-1] c10 N72-28241
 Active tuned circuits for microelectronic construction
 [NASA-CASE-GSC-11340-1] c10 N72-33230
 Thermochromic compositions for detecting heat levels in electronic circuits and devices
 [NASA-CASE-NFO-10764-1] c14 N73-14428
 Electrodeless lamp circuit driven by induction
 [NASA-CASE-MFS-21214-1] c09 N73-30181
 Circuit for detecting initial systole and diastolic notch --- for monitoring arterial pressure
 [NASA-CASE-LEW-11581-1] c54 N75-13531
 Peak holding circuit for extremely narrow pulses
 [NASA-CASE-MSC-14129-1] c33 N75-18479
 High voltage distributor
 [NASA-CASE-GSC-11849-1] c33 N76-16332
 Circuit for automatic load sharing in parallel converter modules
 [NASA-CASE-NPO-14056-1] c33 N79-24257
 Process for preparing high temperature polyimide film laminates
 [NASA-CASE-LAB-12742-1] c24 N81-12174
 Method and apparatus for fabricating improved solar cell modules
 [NASA-CASE-NPO-14416-1] c44 N81-14389
 Ladder supported ring bar circuit
 [NASA-CASE-LEW-13570-1] c33 N81-24348
 Programmable scan/read circuitry for charge coupled device imaging detectors --- for a startracker
 [NASA-CASE-NPO-15345-1] c33 N81-27403

CIRCULAR CONES
 Optical apparatus for visual detection of roundness and regularity of cone surfaces
 [NASA-CASE-XMF-00462] c14 N70-34298

CIRCULAR CYLINDERS
 Modulating and controlling intensity of light beam from high temperature source by servocontrolled rotating cylinders
 [NASA-CASE-XMS-04300] c09 N71-19479

CIRCULAR POLARIZATION
 Left and right hand circular electromagnetic polarization excitation by phase shifter and hybrid networks
 [NASA-CASE-GSC-10021-1] c09 N71-24595
 Planar array circularly polarized antenna with wall slot excitation
 [NASA-CASE-NPO-10301] c07 N72-11148
 Circularly polarized antenna with linearly polarized pair of elements
 [NASA-CASE-ERC-10214] c09 N72-31235

CIRCULAR TUBES
 Evacuated displacement compression molding
 [NASA-CASE-LAB-10782-1] c31 N74-14133

CIRCULATORS (PHASE SHIFT CIRCUITS)
 Development of electromagnetic wave transmission line circulator and application to parametric amplifier circuits
 [NASA-CASE-XNP-02140] c09 N71-23097
 Dielectric-loaded waveguide circulator for cryogenically cooled and cascaded maser waveguide structures
 [NASA-CASE-NPO-14254-1] c36 N80-18372

CLAMPING CIRCUITS
 Clamped amplifier circuit for horizon scanner enabling amplification and accurate measurement of specified parameters
 [NASA-CASE-XGS-01784] c10 N71-20782

CLAMPS
 Portable device for aligning surfaces of two adjacent wall or sheet sections for joining at point of junction
 [NASA-CASE-XNP-01452] c15 N70-41371
 Hydraulic clamping of sheet stock specimens
 [NASA-CASE-XLA-05100] c15 N71-17696
 Inertial component clamping assembly design for spacecraft guidance and control system mounting
 [NASA-CASE-XMS-02184] c15 N71-20813
 Design and development of module joint clamping device for application to solar array construction
 [NASA-CASE-XNP-02341] c15 N71-21531
 Quick attach mechanism for moving or stationary wires, ropes, or cables

[NASA-CASE-IPR-05421] c15 N71-22994

CLAYS
White paint production by heating impure aluminum silicate clay having low solar absorptance
[NASA-CASE-XNP-02139] c18 N71-24184

CLEAN ROOMS
Environmentally controlled suit for working in sterile chamber
[NASA-CASE-LAR-10076-1] c05 N73-20137

CLEANERS
Device for back purging thrust engines
[NASA-CASE-XMS-04826] c28 N71-28849
Noncontaminating swab with absorbent end covered with netted envelope to prevent egress of absorbent material
[NASA-CASE-MFS-18100] c15 N72-11390

CLEANING
Device for removing plastic dust cover from digital computer disk packs for inspection and cleaning
[NASA-CASE-LAR-10590-1] c15 N70-26819
System for sterilizing objects --- cleaning space vehicle systems
[NASA-CASE-KSC-11085-1] c54 N81-24724

CLEAR AIR TURBULENCE
Development of radiometric sensor to warn aircraft pilots of region of clear air turbulence along flight path
[NASA-CASE-ERC-10081] c14 N72-28437
Clear air turbulence detector
[NASA-CASE-MFS-21244-1] c36 N75-15C28
CAT altitude avoidance system
[NASA-CASE-NPO-15351-1] c47 N81-16677

CLIMBING FLIGHT
Aircraft indicator for pilot control of takeoff roll, climbout path and verticle flight path in poor visibility conditions
[NASA-CASE-XLA-00487] c14 N70-40157

CLINICAL MEDICINE
Process for preparing calcium phosphate salts for tooth repair
[NASA-CASE-ERC-10338] c04 N72-33072
Measurement of gas production of microorganisms --- using pressure sensors
[NASA-CASE-LAR-11326-1] c35 N75-33368
Production of I-123
[NASA-CASE-LEW-11390-3] c25 N76-29379
A cervix-to-rectum measuring device in a radiation applicator for use in the treatment of cervical cancer
[NASA-CASE-GSC-12081-2] c52 N77-26796
Automated clinical system for chromosome analysis
[NASA-CASE-NPO-13913-1] c52 N79-12694
Medical diagnosis system and method with multispectral imaging --- depth of burns and optical density of the skin
[NASA-CASE-NPO-14402-1] c52 N81-27783

CLIPS
Low X-ray absorption aneurism clips
[NASA-CASE-LAR-12650-1] c52 N81-29768

CLOCKS
Time synchronization system for synchronizing clocks at remote locations with master clock using moon reflected coded signals
[NASA-CASE-NPO-10143] c10 N71-26326
Circuit for measuring wide range of pulse rates by utilizing high capacity counter
[NASA-CASE-XNP-06234] c10 N71-27137
Fault tolerant clock apparatus utilizing a controlled minority of clock elements
[NASA-CASE-MSC-12531-1] c35 N75-30504
Clock setter
[NASA-CASE-LAR-11458-1] c35 N76-16392

CLOSED CIRCUIT TELEVISION
Spacecraft docking and alignment system --- using television camera system
[NASA-CASE-MSC-12559-1] c18 N76-14186

CLOSED CYCLES
Closed loop radio communication ranging system to determine distance between moving airborne vehicle and fixed ground station
[NASA-CASE-XNP-01501] c21 N70-41930
Digital phase-locked loop
[NASA-CASE-GSC-11623-1] c33 N75-25040
Lead-oxygen dc power supply system having a closed loop oxygen and water system
[NASA-CASE-MFS-23059-1] c44 N76-27664

CLOSED ECOLOGICAL SYSTEMS

Potable water reclamation from human wastes in zero-G environment
[NASA-CASE-XLA-03213] c05 N71-11207
Spacecraft with artificial gravity and earthlike atmosphere
[NASA-CASE-LEW-11101-1] c31 N73-32750
Regenerable device for scrubbing breathable air of CO2 and moisture without special heat exchanger equipment
[NASA-CASE-MSC-14771-1] c54 N77-32722
Cell and method for electrolysis of water and anode
[NASA-CASE-MSC-16394-1] c28 N81-24280

CLOSURES
Design and characteristics of device for closing canisters under high vacuum conditions
[NASA-CASE-XLA-01446] c15 N71-21528
Spacesuit torso closure
[NASA-CASE-ARC-11100-1] c54 N78-31736

CLOUD CHAMBERS
Heat transfer device
[NASA-CASE-MFS-22938-1] c34 N76-18374

CLOUD COVER
Cloud cover sensor
[NASA-CASE-NFO-14936-1] c47 N80-26992

CLOUDS (METEOROLOGY)
Development and characteristics of apparatus for measuring intensity of electric field in atmosphere
[NASA-CASE-KSC-10730-1] c14 N73-32318
Electric field measuring and display system --- for cloud formations
[NASA-CASE-KSC-10731-1] c33 N74-27862

CLUTTER
Clutter free synthetic aperture radar correlator
[NASA-CASE-NFO-14035-1] c32 N78-18266

CMOS
Complementary DMOS-VMOS integrated circuit structure
[NASA-CASE-GSC-12190-1] c33 N79-12321

COAL
Underground mineral extraction
[NASA-CASE-NPO-14140-1] c31 N78-24387
Coal-shale interface detection
[NASA-CASE-MFS-23720-3] c43 N79-25443
Thickness measurement system
[NASA-CASE-MFS-23721-1] c31 N79-28370
Coal-rock interface detector
[NASA-CASE-MFS-23725-1] c43 N79-31706
Coal-shale interface detection system
[NASA-CASE-MFS-23720-2] c43 N80-14423
Coal-shale interface detector
[NASA-CASE-MFS-23720-1] c43 N80-23711
Coal desulfurization --- using iron pentacarbonyl
[NASA-CASE-NFO-14272-1] c25 N81-33246

COAL GASIFICATION
Solar-heated fluidized bed gasification system
[NASA-CASE-NPO-15071-1] c44 N80-24747
Pressure letdown method and device for coal conversion systems
[NASA-CASE-NPO-15100-1] c28 N81-33306

COAL LIQUEFACTION
Surfactant-assisted liquefaction of particulate carbonaceous substances
[NASA-CASE-NFO-13904-1] c25 N79-11152

COAL UTILIZATION
Coal desulfurization process
[NASA-CASE-NPO-13937-1] c44 N78-31527
Continuous coal processing method
[NASA-CASE-NPO-13758-2] c31 N81-15154

COATING
Solder coating process for printed copper circuit protection
[NASA-CASE-XMF-01599] c09 N71-20705
High thermal emittance black surface coatings and process for applying to metal and metal alloy surfaces used in radiative cooling of spacecraft
[NASA-CASE-XLA-06199] c15 N71-24875
Method of forming metal hydride films
[NASA-CASE-LEW-12083-1] c37 N78-13436
Selective coating for solar panels --- using black chrome and black nickel
[NASA-CASE-LEW-12159-1] c44 N78-19599
Boron trifluoride coatings for thermoplastic materials and method of applying same in glow discharge
[NASA-CASE-ARC-11057-1] c27 N78-31233

- Process for producing a well-adhered durable optical coating on an optical plastic substrate --- abrasion resistant polymethyl methacrylate lenses
[NASA-CASE-ARC-11039-1] c74 N78-32854
- COATINGS**
Bonded solid lubricant coatings of calcium fluoride and binder for high temperature stability
[NASA-CASE-XMS-00259] c18 N70-36400
Cathode ray tube with coating of phosphor and cobalt oxides
[NASA-CASE-ERC-10468] c09 N72-20206
Durable antistatic coating for polymethylmethacrylate
[NASA-CASE-NPO-13867-1] c27 N78-14164
Edge coating of flat wires
[NASA-CASE-XMF-05757-1] c31 N79-21227
- COAXIAL CABLES**
Design and development of device for cooling inner conductor of coaxial cable
[NASA-CASE-XNP-09775] c09 N71-20445
Design and development of electric connectors for rigid and semirigid coaxial cables
[NASA-CASE-XNP-04732] c09 N71-20E51
Transducer circuit design with single coaxial cable for input and output connections including incorporation into miniaturized catheter transducer
[NASA-CASE-ARC-10132-1] c09 N71-24597
Collapsible antenna boom and coaxial transmission line having inflatable inner tube
[NASA-CASE-MFS-20068] c07 N71-27191
Vibration isolation system, using coaxial helical compression springs
[NASA-CASE-NPO-11012] c15 N72-11391
Development and characteristics of hermetically sealed coaxial package for containing microwave semiconductor components
[NASA-CASE-GSC-10791-1] c15 N73-14469
System for stabilizing cable phase delay utilizing a coaxial cable under pressure
[NASA-CASE-NPO-13138-1] c33 N74-17927
Refrigerated coaxial coupling --- for microwave equipment
[NASA-CASE-NPO-13504-1] c33 N75-30430
High power RF coaxial switch
[NASA-CASE-NPO-14229-1] c33 N80-18285
- COAXIAL PLASMA ACCELERATORS**
Self-energized plasma compressor
[NASA-CASE-MFS-22145-2] c75 N76-17951
- COBALT ALLOYS**
High strength, corrosion resistant cobalt-based alloys for aerospace structures
[NASA-CASE-XLE-00726] c17 N71-15644
High temperature cobalt-base alloy resistant to corrosion by liquid metals and to sublimation in vacuum environment
[NASA-CASE-XLE-02991] c17 N71-16025
High temperature ferromagnetic cobalt-base alloy for electrical power generating equipment
[NASA-CASE-XLE-03629] c17 N71-23248
Cobalt-tungsten alloys with superior strength at elevated temperatures
[NASA-CASE-LEW-10436-1] c17 N73-32415
- COBALT OXIDES**
Cathode ray tube with coating of phosphor and cobalt oxides
[NASA-CASE-ERC-10468] c09 N72-20206
- COCKPIT SIMULATORS**
Controlled visibility device for simulating poor visibility conditions in training pilots in instrument landing and flight procedures
[NASA-CASE-XFR-04147] c11 N71-10748
- COCKPITS**
Aircraft canopy lock
[NASA-CASE-PRC-11065-1] c05 N81-24047
- CODES**
Design and development of encoder/decoder system to generate binary code which is function of outputs of plurality of bistable elements
[NASA-CASE-NPO-10342] c10 N71-33407
Biorthogonal encoder with modular design
[NASA-CASE-NPO-10629] c08 N72-18184
Method and apparatus for decoding compatible convolutional codes
[NASA-CASE-MSC-14070-1] c32 N74-32598
Digital plus analog output encoder
[NASA-CASE-GSC-12115-1] c62 N76-31946
- Twin-capacitive shaft angle encoder with analog output signal
[NASA-CASE-ARC-10897-1] c33 N77-31404
- CODING**
Description of error correcting methods for use with digital data computers and apparatus for encoding and decoding digital data
[NASA-CASE-XNP-02748] c08 N71-22749
Apparatus and digital technique for coding rate data
[NASA-CASE-LAB-10128-1] c08 N73-20217
Binary concatenated coding system
[NASA-CASE-MSC-14082-1] c60 N76-23850
Differential pulse code modulation
[NASA-CASE-MSC-12506-1] c32 N77-12239
- COEFFICIENT OF FRICTION**
Static coefficient test method and apparatus
[NASA-CASE-GSC-11893-1] c35 N76-31489
Locking redundant link
[NASA-CASE-LAB-11900-1] c37 N79-14382
- COENZYMES**
Bioassay of flavin coenzymes
[NASA-CASE-GSC-10565-1] c06 N72-25149
- COHERENT ELECTROMAGNETIC RADIATION**
Design of folded traveling wave maser structure
[NASA-CASE-XNP-05219] c16 N71-15550
Development of focused image holography with extended sources
[NASA-CASE-ERC-10019] c16 N71-15551
Off-axis coherently pumped laser
[NASA-CASE-GSC-12592-1] c36 N81-12407
- COHERENT LIGHT**
Hybrid holographic system using reference, transmitted, and reflected beams simultaneously
[NASA-CASE-MFS-20074] c16 N71-15565
Development of apparatus for amplitude modulation of diode laser by periodic discharge of direct current power supply
[NASA-CASE-XMS-04269] c16 N71-22895
Coherent light beam device and method for measuring gas density in vacuum chambers
[NASA-CASE-XER-11203] c14 N71-28994
- COHERENT RADIATION**
Design and development of multichannel laser remote control system using modulated helium-neon laser as transmitter and light collector as receiving antenna
[NASA-CASE-LAB-10311-1] c16 N73-16536
Monitoring atmospheric pollutants with a heterodyne radiometer transmitter-receiver
[NASA-CASE-NFO-11919-1] c35 N74-11284
Apparatus for scanning the surface of a cylindrical body
[NASA-CASE-NFO-11861-1] c36 N74-20009
Optically detonated explosive device
[NASA-CASE-NPO-11743-1] c28 N74-27425
Method and apparatus for generating coherent radiation in the ultra-violet region and above by use of distributed feedback
[NASA-CASE-NFO-13346-1] c36 N76-29575
Coherently pulsed laser source
[NASA-CASE-NPO-15111-1] c36 N80-24602
- COINCIDENCE CIRCUITS**
Frequency measurement by coincidence detection with standard frequency
[NASA-CASE-MSC-14649-1] c33 N76-16331
- COLD CATHODES**
Cold cathode discharge tube with pressurized gas cell for meteoroid detection in space
[NASA-CASE-LAB-10483-1] c14 N73-32327
- COLD GAS**
Annular arc accelerator shock tube
[NASA-CASE-NFO-13528-1] c09 N77-10071
- COLD WELDING**
Method of cold welding using ion beam technology
[NASA-CASE-LEW-12982-1] c37 N81-19455
- COLD WORKING**
Cold metal hydroforming techniques using epoxy molds for counteracting creep or stretch
[NASA-CASE-XLE-05641-1] c15 N71-26346
- COLLAPSE**
Collapsible piston for hypervelocity gun
[NASA-CASE-MSC-13789-1] c11 N73-32152
- COLLECTION**
Automatic liquid inventory collecting and dispensing unit
[NASA-CASE-LAB-11071-1] c35 N75-19611
Urine collection device
[NASA-CASE-MSC-16433-1] c52 N78-27750

- Absorbent product and articles made therefrom
 --- for collection of human wastes
 [NASA-CASE-MSC-18223-1] c24 N81-16127
- COLLIMATION**
 Long range laser traversing system
 [NASA-CASE-GSC-11262-1] c36 N74-21091
 Optical alignment device
 [NASA-CASE-ARC-10932-1] c74 N76-22993
 Spatial filter for Q-switched lasers
 [NASA-CASE-LEW-12164-1] c36 N77-32478
 Dual acting slit control mechanism
 [NASA-CASE-LAR-11370-1] c35 N80-28686
 Collimated beam manifold and method for using
 the same --- laser beams
 [NASA-CASE-MFS-25312-1] c74 N80-34251
 Dual laser optical system and method for
 studying fluid flow
 [NASA-CASE-MFS-25315-1] c36 N81-19440
- COLLIMATORS**
 X ray collimating structure for focusing
 radiation directly onto detector
 [NASA-CASE-XHQ-04106] c14 N70-40240
 Collimator for analyzing spatial location of
 near and distant sources of radiation
 [NASA-CASE-MFS-20546-2] c14 N73-30389
 Multiplate focusing collimator --- for scanning
 small near radiation sources
 [NASA-CASE-MFS-20932-1] c35 N75-19616
 Multiprism collimator
 [NASA-CASE-GSC-12608-1] c35 N81-12387
- COLLISION AVOIDANCE**
 Cooperative Doppler radar system for avoiding
 midair collisions
 [NASA-CASE-LAR-10403] c21 N71-11766
 Satellite aided aircraft collision avoidance
 system effective for large number of aircraft
 [NASA-CASE-ERC-10090] c21 N71-24548
 Vertically stacked collinear array of
 independently fed omnidirectional antennas for
 use in collision warning systems on commercial
 aircraft
 [NASA-CASE-LAR-10545-1] c09 N72-21244
 Development and operating principles of
 collision warning system for aircraft accident
 prevention
 [NASA-CASE-HQN-10703] c21 N73-13643
 Development and characteristics of electronic
 signalling system and data processing
 equipment for warning systems to avoid midair
 collisions between aircraft
 [NASA-CASE-LAR-10717-1] c21 N73-30641
 Satellite aided vehicle avoidance system
 [NASA-CASE-ERC-10419-1] c03 N75-30132
- COLLOIDAL GENERATORS**
 Colloidal particle generator for electrostatic
 engine for propelling space vehicles
 [NASA-CASE-XLE-00817] c28 N70-33265
- COLLOIDAL PROPELLANTS**
 Colloidal particle generator for electrostatic
 engine for propelling space vehicles
 [NASA-CASE-XLE-00817] c28 N70-33265
 Low density and low viscosity magnetic
 propellant for use under zero gravity conditions
 [NASA-CASE-XLE-01512] c12 N70-40124
 Electrostatic microthrust propulsion system with
 annular slit colloid thruster
 [NASA-CASE-GSC-10709-1] c28 N71-25213
- COLLOIDS**
 The 2 deg/90 deg laboratory scattering photometer
 --- particulate refractivity in hydrosols
 [NASA-CASE-GSC-12088-1] c74 N78-13674
- COLOR**
 Chemical spot test for identifying magnesium or
 magnesium alloys used in aerospace applications
 [NASA-CASE-LAR-10953-1] c17 N73-27446
- COLOR PHOTOGRAPHY**
 Color photointerpretation of interference colors
 reflected from thin film oil-coated components
 in moving gases for gas flow visualization
 [NASA-CASE-XMP-01779] c12 N71-20815
- COLOR TELEVISION**
 Color television system utilizing single gun
 current sensitive color cathode ray tube
 [NASA-CASE-ERC-10098] c09 N71-28618
 Color television system for allowing monochrome
 television camera to produce color pictures
 [NASA-CASE-MSC-12146-1] c07 N72-17109
 Video tape recorder with scan conversion
 playback for color television signals
- [NASA-CASE-NPO-10166-1] c07 N73-22076
 Scan converting video tape recorder
 [NASA-CASE-NPO-10166-2] c35 N76-16391
 System for producing chroma signals
 [NASA-CASE-MSC-14683-1] c74 N77-18893
 Full color hybrid display for aircraft simulators
 --- landing aids
 [NASA-CASE-ARC-10903-1] c09 N78-18083
- COLOR VISION**
 Color perception tester for testing color code
 perceptiveness of individuals
 [NASA-CASE-KSC-10278] c05 N72-16015
- COLUMNS**
 Lightweight structural columns --- space
 erectable trusses
 [NASA-CASE-LAR-12095-1] c31 N81-25258
- COLUMNS (PROCESS ENGINEERING)**
 Micropacked column for rapid chromatographic
 analysis using low gas flow rates
 [NASA-CASE-XNP-04816] c06 N69-39936
- COLUMNS (SUPPORTS)**
 Beam connector apparatus and assembly
 [NASA-CASE-MFS-25134-1] c31 N81-12283
 Telescoping columns --- parabolic antenna support
 [NASA-CASE-LAR-12195-1] c31 N81-27324
- COMBINATORIAL ANALYSIS**
 Apparatus for computing square roots
 [NASA-CASE-XGS-04768] c08 N71-19437
 Combinational logic for generating gate drive
 signals for phase control rectifiers
 [NASA-CASE-MFS-25208-1] c33 N81-27402
- COMBUSTION**
 Device for detection of combustion light
 preceding gaseous explosions
 [NASA-CASE-LAR-10739-1] c14 N73-16484
- COMBUSTION CHAMBERS**
 Rocket chamber leak test fixture using tubular
 plug
 [NASA-CASE-XPR-09479] c14 N69-27503
 Propellant injectors for rocket combustion
 chambers
 [NASA-CASE-XLE-00103] c28 N70-33241
 Metal ribbon wrapped outer wall for
 regeneratively cooled combustion chamber
 [NASA-CASE-XLE-00164] c15 N70-36411
 Apparatus for cooling and injecting hypergolic
 propellants into combustion chamber of small
 rocket engine
 [NASA-CASE-XLE-00303] c15 N70-36535
 Ignition system for monopropellant combustion
 devices
 [NASA-CASE-XNP-00249] c28 N70-38249
 Fabrication method for lightweight
 regeneratively cooled combustion chamber of
 channel construction
 [NASA-CASE-XLE-00150] c28 N70-41818
 Rocket combustion chamber stability by
 controlling transverse instability during
 propellant combustion
 [NASA-CASE-XLE-04603] c33 N71-21507
 Regenerative cooling system for rocket
 combustion chamber using coolant tubes in
 convergent-divergent nozzle
 [NASA-CASE-XLE-04857] c28 N71-23968
 Rocket engine injector orifice to accommodate
 changes in density, velocity, and pressure,
 thereby maintaining constant mass flow rate of
 propellant into rocket combustion chamber
 [NASA-CASE-XLE-03157] c28 N71-24736
 Coaxial injector for mixing liquid propellants
 within combustion chambers
 [NASA-CASE-NPO-11095] c15 N72-25455
 Swirl can, full-annulus combustion chambers for
 high performance gas turbine engines
 [NASA-CASE-LEW-11326-1] c23 N73-30665
 Method of electroforming a rocket chamber
 [NASA-CASE-LEW-11118-1] c20 N74-32919
 Controlled separation combustor --- airflow
 distribution in gas turbine engines
 [NASA-CASE-LEW-11593-1] c20 N76-14190
 Fuel combustor
 [NASA-CASE-LEW-12137-1] c25 N78-10224
 Direct heating surface combustor
 [NASA-CASE-LEW-11877-1] c34 N78-27357
 Combustor --- low nitrogen oxide formation
 [NASA-CASE-NPO-13958-1] c25 N79-11151
 A system for concurrently delivering a stream of
 powdered fuel and a stream of powdered
 oxidizer to a combustion chamber for a

reaction motor
[NASA-CASE-MPS-23904-1] c20 N79-13077

Heat exchanger --- rocket combustion chambers
and cooling systems
[NASA-CASE-LEW-12252-1] c34 N79-13288

General purpose rocket furnace
[NASA-CASE-MPS-23460-1] c12 N79-26075

Reduction of nitric oxide emissions from a
combustor
[NASA-CASE-ARC-10814-2] c07 N80-26298

Diesel engine catalytic combustor system ---
turbocharging
[NASA-CASE-LEW-12995-1] c37 N80-26659

Heat pipes to reduce engine exhaust emissions
[NASA-CASE-LEW-12590-1] c25 N81-19245

COMBUSTION CONTROL
Pressurized gas injection for burning rate
control of solid propellants
[NASA-CASE-XLE-03494] c27 N71-21619

COMBUSTION EFFICIENCY
Fuel injection system for maximum combustion
efficiency of rocket engines
[NASA-CASE-XLE-00111] c28 N70-38199

COMBUSTION PHYSICS
Characteristics of solid propellant rocket
engine with controlled rate of thrust buildup
operating in vacuum environment
[NASA-CASE-NPO-11559] c28 N73-24784

Plasma igniter for internal combustion engine
[NASA-CASE-NPO-13828-1] c37 N79-11405

COMBUSTION PRODUCTS
Contamination free separation nut eliminating
combustion products from ambient surroundings
generated by squib firing
[NASA-CASE-XGS-01971] c15 N71-15922

Device for generating and controlling combustion
products for testing of fire detection system
[NASA-CASE-GSC-11095-1] c14 N72-10375

System for minimizing internal combustion engine
pollution emission
[NASA-CASE-NPO-13402-1] c37 N76-18457

Coal desulfurization process
[NASA-CASE-NPO-13937-1] c44 N78-31527

Combustor --- low nitrogen oxide formation
[NASA-CASE-NPO-13958-1] c25 N79-11151

COMBUSTION STABILITY
Rocket combustion chamber stability by
controlling transverse instability during
propellant combustion
[NASA-CASE-XLE-04603] c33 N71-21507

COMFORT
Ride quality meter
[NASA-CASE-LAR-12882-1] c54 N81-31848

COMMAND AND CONTROL
Multiple rate digital command detection system
with range clean-up capability
[NASA-CASE-NPO-13753-1] c32 N77-20289

Common data buffer system --- communication with
computational equipment utilized in spacecraft
operations
[NASA-CASE-KSC-11048-1] c62 N81-24779

COMMAND MODULES
Energy absorbing crew couch strut for Apollo
command module
[NASA-CASE-MSC-12279] c15 N72-17450

COMMUNICATING
Communication between computers using two
identical communications links
[NASA-CASE-NPO-11161] c08 N72-25207

COMMUNICATION
Circuitry for developing autocorrelation
function continuously within signal receiving
period
[NASA-CASE-XNP-00746] c07 N71-21476

Superconductive resonant cavity for improved
signal to noise ratio in communication signal
[NASA-CASE-MSC-12259-2] c07 N72-33146

COMMUNICATION CABLES
Method of making molded electric connector for
use with flat conductor cables
[NASA-CASE-XMF-03498] c15 N71-15586

Process for making RF shielded cable connector
assemblies and resulting structures
[NASA-CASE-GSC-11215-1] c09 N73-28083

Fiber distributed feedback laser
[NASA-CASE-NPO-13531-1] c36 N76-24553

High acceleration cable deployment system
[NASA-CASE-ARC-11256-1] c37 N79-23432

High-speed data link for moderate distances and
noisy environments
[NASA-CASE-NPO-14152-1] c32 N80-18252

COMMUNICATION EQUIPMENT
Multiplexed communication system design
including automatic correction of transmission
errors introduced by frequency spectrum shifts
[NASA-CASE-XNP-01306] c07 N71-20814

Binary data decoding device for use at receiving
end of communication channel
[NASA-CASE-NPO-10118] c07 N71-24741

Characteristics of data-aided carrier tracking
loop used for tracking carrier in angle
modulated communications system
[NASA-CASE-NPO-11282] c10 N73-16205

Doppler compensated communication system for
locating supersonic transport position
[NASA-CASE-GSC-10087-4] c07 N73-20174

Differential phase shift keyed communication
system
[NASA-CASE-MSC-14065-1] c32 N74-26654

COMMUNICATION SATELLITES
Rectable, inflatable, radio signal reflecting
passive communication satellite
[NASA-CASE-XLA-00210] c30 N70-40309

Development of antenna system for spin
stabilized communication satellite for
simultaneous reception and transmission of data
[NASA-CASE-XGS-02607] c31 N71-23009

Elimination of tracking occultation problems
occurring during continuous monitoring of
interplanetary missions by using Earth
orbiting communications satellite
[NASA-CASE-XAC-06029-1] c31 N71-24813

Satellite radio communication system with remote
steerable antenna
[NASA-CASE-XNP-02389] c07 N71-28900

Satellite aided vehicle avoidance system
[NASA-CASE-ERC-10419-1] c03 N75-30132

Ultra stable frequency distribution system
[NASA-CASE-NPO-13836-1] c32 N78-15323

COMMUTATION
High speed low level voltage commutating switch
[NASA-CASE-XAC-00060] c09 N70-39915

Elimination of current spikes in buck power
converters
[NASA-CASE-NPO-14505-1] c33 N81-19393

COMMUTATORS
Rocket-borne aspect sensor consisting of
radiation sensor, apertured disk, commutator,
and counting circuits
[NASA-CASE-XGS-08266] c14 N69-27432

Commutator for steering precisely controlled
bidirectional currents through numerous loads
by use of magnetic core shift registers
[NASA-CASE-NPO-10743] c08 N72-21199

COMPARATOR CIRCUITS
Describing frequency discriminator using digital
logic circuits and supplying single binary
output signal
[NASA-CASE-MPS-14322] c08 N71-18692

Development of pulsed differential comparator
circuit
[NASA-CASE-XLE-03804] c10 N71-19471

Multi-cell battery protection system
[NASA-CASE-LEW-12039-1] c44 N78-14625

Window comparator
[NASA-CASE-FRC-10090-1] c33 N78-18308

COMPARATORS
Photometric flow meter with comparator reference
means
[NASA-CASE-XGS-01331] c14 N71-22996

Characteristics of comparator circuits for
comparison of binary numbers in information
processing system
[NASA-CASE-XNP-04819] c08 N71-23295

High stability buffered phase comparator
[NASA-CASE-GSC-12645-1] c33 N81-31482

COMPENSATORS
Star image motion compensator using telescope
for maintaining fixed images
[NASA-CASE-LAR-10523-1] c14 N72-22444

Thermal compensator for closed-cycle helium
refrigerator --- assuring constant temperature
for an infrared laser diode
[NASA-CASE-GSC-12168-1] c31 N79-17029

Apparatus for and method of compensating dynamic
unbalance
[NASA-CASE-GSC-12550-1] c37 N81-22358

COMPONENT RELIABILITY

Reconfiguring redundancy management
[NASA-CASE-MSC-18498-1] c60 N80-30050

COMPOSITE MATERIALS

High strength reinforced metallic composites for applications over wide temperature range
[NASA-CASE-XLE-02428] c17 N70-33288

Method for producing fiber reinforced metallic composites with high strength and elasticity over wide temperature range
[NASA-CASE-XLE-00231] c17 N70-38198

Composites reinforced with short metal fibers or whiskers and having high tensile strength
[NASA-CASE-XLE-00228] c17 N70-38490

Unfired-ceramic, highly reflective composite insulation for large launch vehicles
[NASA-CASE-XMP-01030] c18 N70-41583

Freeze casting of metal ceramic and refractory compound powders into plastic slips
[NASA-CASE-XLE-00106] c15 N71-16076

Preparation and characteristics of lightweight refractory insulation
[NASA-CASE-XMP-05279] c18 N71-16124

Flexible composite membrane structure impervious to extremely reactive chemicals in rocket propellants
[NASA-CASE-XNP-08837] c18 N71-16210

Cryostat for flexure fatigue testing of composite materials
[NASA-CASE-XMP-02964] c14 N71-17659

Description of method for producing metallic composites reinforced with ceramic and refractory hard metals that are fibered in place
[NASA-CASE-XLE-03925] c18 N71-22894

Electrically coupled individually encapsulated solar cell matrix
[NASA-CASE-NPO-11190] c03 N71-34044

Heat treatment and tooling for forming shapes from thermosetting honeycomb core sheets
[NASA-CASE-NPO-11036] c15 N72-24522

Method for making fiber composites with high strength at high temperatures
[NASA-CASE-LEW-10424-2-2] c18 N72-25539

Development of thermal compensating structure which maintains uniform length with changes in temperature
[NASA-CASE-MPS-20433] c15 N72-28496

Bearing material --- composite material with low friction surface for rolling or sliding contact
[NASA-CASE-LEW-11930-1] c24 N76-22309

Fluid seal for rotating shafts
[NASA-CASE-LEW-11676-1] c37 N76-22541

Non-flammable elastomeric fiber from a fluorinated elastomer and containing an halogenated flame retardant
[NASA-CASE-MSC-14331-1] c27 N76-24405

Method of growing composites of the type exhibiting the Soret effect --- improved structure of eutectic alloy crystals
[NASA-CASE-MPS-22926-1] c24 N77-27187

Hybrid composite laminate structures
[NASA-CASE-LEW-12118-1] c24 N77-27188

Honeycomb-laminate composite structure
[NASA-CASE-ARC-10913-1] c24 N78-15180

High temperature resistant cermet and ceramic compositions --- for thermal resistant insulators and refractory coatings
[NASA-CASE-NPO-13690-1] c27 N78-19302

Molded composite pyrogen igniter for rocket motors --- solid propellant ignition
[NASA-CASE-LAR-12018-1] c20 N78-24275

Atomic hydrogen storage method and apparatus
[NASA-CASE-LEW-12081-1] c28 N78-24365

Method of making bearing materials --- self-lubricating, oxidation resistant composites for high temperature applications
[NASA-CASE-LEW-11930-4] c24 N79-17916

Composite seal for turbomachinery --- backings for turbine engine shrouds
[NASA-CASE-LEW-12131-1] c37 N79-18318

Crystalline polyimides --- reinforcing fibers for high temperature composites and adhesives as well as flame retardation
[NASA-CASE-LAR-12099-1] c27 N80-16158

Cork-resin ablative insulation for complex surfaces and method for applying the same
[NASA-CASE-MPS-23626-1] c24 N80-26388

Method of making bearing material
[NASA-CASE-LEW-11930-3] c24 N80-33482

Tackifier for addition polyimides containing monoethylphthalate

[NASA-CASE-LAR-12642-1] c27 N81-29229

Resin composition, process for producing the same, product produced therefrom and process for producing said product
[NASA-CASE-ARC-11331-1] c27 N81-31363

COMPOSITE PROPELLANTS

Ammonium perchlorate composite propellant with organic Cu/II/ chelate catalytic additive
[NASA-CASE-LAR-10173-1] c27 N71-14090

Silicone containing solid propellant
[NASA-CASE-NPO-14477-1] c28 N80-28536

Recovery of aluminum from composite propellants
[NASA-CASE-NPO-14110-1] c28 N81-15119

COMPOSITE STRUCTURES

Inflatable honeycomb panel element for lightweight structures usable in space stations and other construction
[NASA-CASE-XLA-00204] c32 N70-36536

Shrouded composite propulsion system configuration
[NASA-CASE-XLA-01043] c28 N71-10780

Bonding method in the manufacture of continuous regression rate sensor devices
[NASA-CASE-LAR-10337-1] c24 N75-30260

Leading edge protection for composite blades
[NASA-CASE-LEW-12550-1] c24 N77-19170

Composite sandwich lattice structure
[NASA-CASE-LAR-11898-1] c24 N78-10214

Method of making a composite sandwich lattice structure
[NASA-CASE-LAR-11898-2] c24 N78-17149

Low density bismaleimide-carbon microballoon composites --- aircraft and submarine compartment safety
[NASA-CASE-ARC-11040-2] c24 N78-27184

Aluminum or copper substrate panel for selective absorption of solar energy
[NASA-CASE-MPS-23518-3] c44 N80-16452

Lightweight structural columns --- space erectable trusses
[NASA-CASE-LAR-12095-1] c31 N81-25258

COMPOSITION (PROPERTY)

Moving particle composition analyzer
[NASA-CASE-GSC-11889-1] c35 N76-16393

COMPRESSED AIR

Actuator using compressed gas as driving force to control valve handling large liquid flows
[NASA-CASE-XHQ-01208] c15 N70-35409

COMPRESSIBILITY

Nozzle extraction process and handlemeter for measuring handle
[NASA-CASE-LAR-12147-1] c31 N79-11246

COMPRESSIBLE FLUIDS

Capacitor for measuring density of compressible fluid in liquid, gas, or liquid and gas phases
[NASA-CASE-XLE-00143] c14 N70-36618

Apparatus for tensile strength testing of specimen by pressurized fluid
[NASA-CASE-XKS-06250] c14 N71-15600

COMPRESSION

Method and apparatus for producing very low temperature refrigeration based on gas pressure balance
[NASA-CASE-XNP-08877] c15 N71-23025

Method for compression molding of thermosetting plastics utilizing a temperature gradient across the plastic to cure the article
[NASA-CASE-LAR-10489-1] c31 N74-18124

Mechanical bonding of metal
[NASA-CASE-LEW-12941-1] c31 N81-16329

COMPRESSION LOADS

Pressure transducer for systems for measuring forces of compression
[NASA-CASE-NPO-10832] c14 N72-21405

Solid medium thermal engine
[NASA-CASE-ARC-10461-1] c44 N74-33379

Locking redundant link
[NASA-CASE-LAR-11900-1] c37 N79-14382

Fixture for environmental exposure of structural materials under compression
[NASA-CASE-LAR-12602-1] c35 N81-19429

COMPRESSION RATIO

Automatic compression adjusting mechanism for internal combustion engines
[NASA-CASE-MSC-18807-1] c37 N81-29442

COMPRESSION TESTS

Test equipment to prevent buckling of small diameter specimens during compression tests

COMPRESSOR BLADES

SUBJECT INDEX

[NASA-CASE-LAR-10440-1] c14 N73-32323
 Anti-buckling fatigue test assembly --- for
 subjecting metal specimen to tensile and
 compressive loads at constant temperature
 [NASA-CASE-LAR-10426-1] c09 N74-19528
 Compression test fixture
 [NASA-CASE-MSC-18723-1] c39 N81-24470

COMPRESSOR BLADES
 Process for welding compressor and turbine
 blades to rotors and discs of jet engines
 [NASA-CASE-LEW-10533-1] c15 N73-28515

COMPRESSORS
 Thermal pump-compressor for converting solar
 energy
 [NASA-CASE-XLA-00377] c33 N71-17610
 Self-energized plasma compressor
 [NASA-CASE-MPS-22145-2] c75 N76-17551
 Gas compression apparatus
 [NASA-CASE-MSC-14757-1] c35 N78-10428
 Composite seal for turbomachinery
 [NASA-CASE-LEW-12131-2] c37 N80-26658
 A cycling Joule Thomson refrigerator
 [NASA-CASE-NPO-15251-1] c31 N81-19344

COMPUTATION
 Apparatus for computing square roots
 [NASA-CASE-XGS-04768] c08 N71-19437
 Ruler for making navigational computations
 [NASA-CASE-XNP-01458] c04 N78-17631

COMPUTER COMPONENTS
 Computer circuit performing both counting and
 shifting logic operations also capable of
 miniaturization and integration in basic
 circuits
 [NASA-CASE-XNP-01753] c08 N71-22897
 Binary to binary coded decimal converter
 [NASA-CASE-GSC-12044-1] c60 N78-17691
 Computer circuit card puller
 [NASA-CASE-FRC-11042-1] c37 N80-20589
 Memory-based parallel data output controller
 [NASA-CASE-GSC-12447-1] c60 N80-21987
 Control means for a solid state crossbar switch
 [NASA-CASE-NPO-15066-1] c33 N80-33679

COMPUTER DESIGN
 Two-dimensional radiant energy array computers
 and computing devices
 [NASA-CASE-GSC-11839-1] c60 N77-14751

COMPUTER GRAPHICS
 System for digitizing graphic displays
 [NASA-CASE-NPO-10745] c08 N72-22164

COMPUTER NETWORKS
 High-speed data link for moderate distances and
 noisy environments
 [NASA-CASE-NPO-14152-1] c32 N80-18252
 Common data buffer system --- communication with
 computational equipment utilized in spacecraft
 operations
 [NASA-CASE-KSC-11048-1] c62 N81-24779

COMPUTER PROGRAMMING
 Encoders designed to generate comma free
 biorthogonal Reed-Muller type code comprising
 conversion of 64 6-bit words into 64 32-bit
 data for communication purposes
 [NASA-CASE-NPO-10595] c10 N71-25917
 Priority interrupt system --- comprised of four
 registers
 [NASA-CASE-NPO-13067-1] c60 N76-18800

COMPUTER PROGRAMS
 Self testing and repairing computer comprising
 control and diagnostic unit and rollback
 points for error correction
 [NASA-CASE-NPO-10567] c08 N71-24633
 Development of computer program for estimating
 reliability of self-repair and fault-tolerant
 systems with respect to selected system and
 mission parameters
 [NASA-CASE-NPO-13086-1] c15 N73-12495
 Development of flight simulator system to show
 position of joystick displacement
 [NASA-CASE-NPO-11497] c08 N73-25206

COMPUTER STORAGE DEVICES
 Magnetic matrix memory system for nondestructive
 reading of information contained in matrix
 [NASA-CASE-XNP-05835] c08 N71-12504
 Binary sequence detector with few memory
 elements and minimized logic circuit complexity
 [NASA-CASE-XNP-05415] c08 N71-12505
 Pulsed magnetic core memory element with
 blocking oscillator feedback for interrogation
 without loss of digital information

[NASA-CASE-XGS-03303] c08 N71-18595
 Reliable magnetic core circuit apparatus with
 application in selection matrices for digital
 memories
 [NASA-CASE-XNP-01318] c10 N71-23033
 Time division multiplexed telemetry-transmitting
 system controlled by programmed memory
 [NASA-CASE-GSC-10131-1] c07 N71-24624
 Serial digital decoder design with square
 circuit matrix and serial memory storage units
 [NASA-CASE-NPO-10150] c08 N71-24650
 Digital memory system with multiple switch cores
 for driving each word location
 [NASA-CASE-XNP-01466] c10 N71-26434
 Redundant memory for enhanced reliability of
 digital data processing system
 [NASA-CASE-GSC-10564] c10 N71-29135
 Memory device employing semiconductor and
 ferroelectric properties of single crystal
 barium titanate
 [NASA-CASE-BRC-10307] c08 N72-21198
 Shared memory for a fault-tolerant computer
 [NASA-CASE-NPO-13139-1] c60 N76-21914

COMPUTER SYSTEMS DESIGN
 Adaptive voting computer system
 [NASA-CASE-MSC-13932-1] c62 N74-14920
 Computer interface system
 [NASA-CASE-NPO-13428-1] c60 N77-12721

COMPUTER TECHNIQUES
 Automated system for identifying traces of
 organic chemical compounds in aqueous solutions
 [NASA-CASE-NPO-13063-1] c25 N76-18245
 Apparatus for determining thermophysical
 properties of test specimens
 [NASA-CASE-LAR-11883-1] c09 N77-27131
 Computerized system for translating a torch head
 [NASA-CASE-MPS-23620-1] c37 N79-10421
 Automatic flowmeter calibration system
 [NASA-CASE-KSC-11076-1] c34 N81-26402

COMPUTERIZED SIMULATION
 Integrated time shared instrumentation display
 for aerospace vehicle simulators
 [NASA-CASE-XLA-01952] c08 N71-12507
 Microcomputerized electric field meter
 diagnostic and calibration system
 [NASA-CASE-KSC-11035-1] c35 N78-28411
 Simulator method and apparatus for practicing
 the mating of an observer-controlled object
 with a target
 [NASA-CASE-MPS-23052-2] c74 N79-13855

COMPUTERS
 Telemetry data unit to form multibit words for
 use between demodulator and computer
 [NASA-CASE-XNP-09225] c09 N69-24333
 Data compression processor for monitoring analog
 signals by sampling procedure
 [NASA-CASE-NPO-10068] c08 N71-19288
 Communication between computers using two
 identical communications links
 [NASA-CASE-NPO-11161] c08 N72-25207

CONCAVITY
 Concave grating spectrometer for use in near and
 vacuum ultraviolet regions
 [NASA-CASE-XGS-01036] c14 N70-40003

CONCENTRATORS
 Concentrator device for controlling direction of
 solar energy onto energy converters
 [NASA-CASE-XLE-01716] c09 N70-40234
 Thermostatically controlled non-tracking type
 solar energy concentrator
 [NASA-CASE-NPO-13497-1] c44 N76-14602
 Three-dimensional tracking solar energy
 concentrator and method for making same
 [NASA-CASE-NPO-13736-1] c44 N77-32583
 Non-tracking solar energy collector system
 [NASA-CASE-NPO-13817-1] c44 N79-11471
 Solar cell module
 [NASA-CASE-NPO-14467-1] c44 N79-31753
 Solar concentrator
 [NASA-CASE-MPS-23727-1] c44 N80-14473
 Solar energy receiver for a Stirling engine
 [NASA-CASE-NPO-14619-1] c44 N81-17518

CONCENTRIC SPHERES
 Method and apparatus for producing concentric
 hollow spheres --- inertial confinement fusion
 targets
 [NASA-CASE-NPO-14596-1] c31 N81-33319

CONDENSATES
 Apparatus for determining volatile condensable

- material present in polymeric products
[NASA-CASE-XNP-09699] c06 N71-24607
- Condensate removal device for heat exchanger
[NASA-CASE-MSC-14143-1] c77 N75-26139
- CONDENSERS (LIQUIFIERS)**
- Condenser-separator for dehumidifying air
utilizing sintered metal surface
[NASA-CASE-XLA-08645] c15 N69-21465
- Condensate removal device for heat exchanger
[NASA-CASE-MSC-14143-1] c77 N75-20139
- CONDENSING**
- Preparation of heterocyclic block copolymer
omega-diamidoximes
[NASA-CASE-ABC-11060-1] c27 N79-22300
- CONDUCTING FLUIDS**
- Multiducted electromagnetic pump for conductive
liquids
[NASA-CASE-NPO-10755] c15 N71-27084
- Internally supported flexible duct joint ---
device for conducting fluids in high pressure
systems
[NASA-CASE-MFS-19193-1] c37 N75-19686
- CONDUCTIVE HEAT TRANSFER**
- Measuring conductive heat flow and thermal
conductivity of laminar gas stream in
cylindrical plug to simulate atmospheric reentry
[NASA-CASE-XLB-00266] c14 N70-34156
- Space suit body heat exchanger design composed
of thermal conductance yarn and liquid coolant
loops
[NASA-CASE-XMS-09571] c05 N71-19439
- Compact pulsed laser having improved heat
conductance
[NASA-CASE-NPO-13147-1] c36 N77-25502
- Automatic thermal switch --- Space Shuttle
equipment bay temperature control
[NASA-CASE-GSC-12415-1] c34 N80-18338
- Automatic thermal switch
[NASA-CASE-GSC-12553-1] c33 N80-21671
- CONDUCTORS**
- Support for flexible conductor cable between
drawers or racks holding electronic equipment
and cabinet assembly housing drawers or racks
[NASA-CASE-XMP-07587] c15 N71-18701
- Method for making conductors for ferrite memory
arrays --- from pre-formed metal conductors
[NASA-CASE-LAR-10994-1] c24 N75-13032
- CONES**
- Black body radiometer design with temperature
sensing and cavity heat source cone winding
[NASA-CASE-XNP-09701] c14 N71-26475
- CONFINEMENT**
- Observation window for internal gas confining
chamber
[NASA-CASE-NPO-10890] c11 N73-12265
- CONICAL BODIES**
- Conical valve plug for use with reactive
cryogenic fluids
[NASA-CASE-XLB-00715] c15 N70-34859
- Conical reflector antenna with feed
approximating line source
[NASA-CASE-NPO-10303] c07 N72-22127
- Characteristics of microwave antenna with
conical reflectors to generate plane wave front
[NASA-CASE-NPO-11661] c07 N73-14130
- CONICAL SCANNING**
- Conical scan tracking system employing a large
antenna
[NASA-CASE-NPO-14009-1] c32 N79-13214
- CONICAL SHELLS**
- Capacitance measuring device for determining
flare accuracy on tapered tubes
[NASA-CASE-XKS-03495] c14 N69-39785
- Foldable, double concave and parabolic reflector
system for solar ray concentration
[NASA-CASE-XLA-04622] c03 N70-41580
- Rotary spindle lathe attachments for machining
geometrical cones
[NASA-CASE-XMS-04292] c15 N71-22722
- CONJUGATES**
- Phase conjugation method and apparatus for an
active retrodirective antenna array
[NASA-CASE-NPO-13641-1] c32 N79-24210
- CONNECTORS**
- Expanding and contracting connector strip for
solar cell array of Nimbus satellite
[NASA-CASE-XGS-01395] c03 N69-21539
- Design and development of quick release connector
[NASA-CASE-XLA-01141] c15 N71-13789
- Development and characteristics of strainer for
flared tube fitting
[NASA-CASE-XLA-05056] c15 N72-11389
- Process for making RF shielded cable connector
assemblies and resulting structures
[NASA-CASE-GSC-11215-1] c09 N73-28083
- Low heat leak connector for cryogenic system
[NASA-CASE-XLB-02367-1] c31 N79-21225
- CONSCIOUSNESS**
- Development of apparatus and method for
quantitatively measuring brain activity as
automatic indication of sleep state and level
of consciousness
[NASA-CASE-MSC-13282-1] c05 N71-24729
- CONSOLES**
- Telephone multiline signaling using common
signal pair
[NASA-CASE-KSC-11023-1] c32 N79-23310
- CONSTANTS**
- Spring operated accelerator and constant force
spring mechanism therefor
[NASA-CASE-ABC-10898-1] c35 N77-18417
- CONSTRAINTS**
- Three stage motion restraining mechanism for
restraining and damping three dimensional
vibrational movement of gimballed package
during launch of spacecraft
[NASA-CASE-GSC-10306-1] c15 N71-24694
- Cable guide and restraint device for reefing
tubes in uniform manner
[NASA-CASE-LAR-10129-1] c15 N73-25512
- Development of restraint system for securing
personnel to ergometer while exercising under
weightless conditions
[NASA-CASE-MFS-21046-1] c14 N73-27377
- Reefing system
[NASA-CASE-LAR-10129-2] c37 N74-20063
- Restraining mechanism
[NASA-CASE-MSC-13054] c54 N78-17677
- Spine immobilization apparatus
[NASA-CASE-ABC-11167-1] c52 N81-25662
- CONSTRUCTION**
- Beam connector apparatus and assembly
[NASA-CASE-MFS-25134-1] c31 N81-12283
- CONSTRUCTION MATERIALS**
- Apparatus and method of assembling building
blocks by folding pre-cut flat sheets of
material during on-site construction
[NASA-CASE-MSC-12233-1] c15 N72-25454
- Development of construction block in form of
container folded from flat sheet and filled
with solid material for architectural purposes
[NASA-CASE-MSC-12233-2] c32 N73-13921
- CONTACT POTENTIALS**
- Lightweight, rugged, inexpensive satellite
battery for producing electrical power from
ionosphere using electrodes with different
contact potentials
[NASA-CASE-XGS-01593] c03 N70-35408
- CONTAINERLESS MELTS**
- Method of crystallization --- in gravity-free
environments
[NASA-CASE-MFS-23001-1] c76 N77-32919
- Containerless melting and rapid solidification
apparatus and method
[NASA-CASE-MFS-25305-1] c35 N81-16427
- Method and apparatus for supercooling and
solidifying substances --- containerless melts
and space processing
[NASA-CASE-MFS-25242-1] c35 N81-24413
- CONTAINERS**
- Manufacture of fluid containers from fused
coated polyester sheets having resealable septum
[NASA-CASE-NPO-10123] c15 N71-24835
- Method for locating leaks in hermetically sealed
containers
[NASA-CASE-ERC-10045] c15 N71-24910
- Quantitative liquid measurements in container by
resonant frequencies
[NASA-CASE-XNP-02500] c18 N71-27397
- CONTAMINANTS**
- Fluid transferring system design for purging
toxic, corrosive, or noxious fluids and fumes
from materials handling equipment for
cleansing and accident prevention
[NASA-CASE-XMS-01905] c12 N71-21089
- CONTAMINATION**
- Emission spectroscopy method for contamination
monitoring of inert gas metal arc welding

- [NASA-CASE-XMF-02039] c15 N71-15671
Contamination free separation nut eliminating
combustion products from ambient surroundings
generated by squib firing
[NASA-CASE-XGS-01971] c15 N71-15922
Apparatus and process for volumetrically
dispensing reagent quantities of volatile
chemicals for small batch reactions
[NASA-CASE-NPO-10070] c15 N71-27372
Portable tester for monitoring bacterial
contamination by adenosine triphosphate light
reaction
[NASA-CASE-GSC-10879-1] c14 N72-25413
Biocontamination and particulate detection system
[NASA-CASE-NPO-13953-1] c35 N79-28527
- CONTINUOUS RADIATION**
CW ultrasonic bolt tensioning monitor
[NASA-CASE-LAR-12016-1] c39 N78-15512
Pseudo continuous wave instrument --- ultrasonics
[NASA-CASE-LAR-12260-1] c35 N79-10390
Low-frequency radio navigation system
[NASA-CASE-NPO-15264-1] c04 N81-22036
- CONTINUOUS WAVE LASERS**
High power laser apparatus and system
[NASA-CASE-XLE-2529-2] c36 N75-27364
Continuous plasma laser --- method and apparatus
for producing intense, coherent, monochromatic
light from low temperature plasma
[NASA-CASE-XNP-04167-3] c36 N77-19416
Coherently pulsed laser source
[NASA-CASE-NPO-15111-1] c36 N80-24602
Stark effect spectrophone for continuous
absorption spectra monitoring --- a technique
for gas analysis
[NASA-CASE-NPO-15102-1] c25 N81-25159
- CONTINUOUS WAVE RADAR**
Phase locked loop with sideband rejecting
properties in continuous wave tracking radar
[NASA-CASE-XNP-02723] c67 N70-41680
FM/CW radar system
[NASA-CASE-MFS-22234-1] c32 N79-10264
- CONTOURS**
Describing device for surveying contour of
surface using X-Y plctter and traveling
transducer
[NASA-CASE-XLA-08646] c14 N71-17586
Processing system for semiperiodic electrical
signals to produce real time contoured display
[NASA-CASE-MSC-13407-1] c10 N72-20225
Variable contour securing system
[NASA-CASE-MSC-16270-1] c37 N78-27423
Device for measuring the contour of a surface
[NASA-CASE-LAR-11869-1] c74 N78-27904
Contour detector and data acquisition system for
the left ventricular outline
[NASA-CASE-ARC-10985-1] c52 N79-10724
Contour measurement system
[NASA-CASE-MFS-23726-1] c43 N79-26439
Cork-resin ablative insulation for complex
surfaces and method for applying the same
[NASA-CASE-MFS-23626-1] c24 N80-26388
- CONTROL**
Valve assembly for controlling simultaneously
more than one fluid flow, and having stable
qualities under loads
[NASA-CASE-XMS-05890] c09 N71-23191
Control system for pressure balance device used
in calibrating pressure gages
[NASA-CASE-XMF-04134] c14 N71-23755
Failure detection and control means for improved
drift performance of a gimballed platform system
[NASA-CASE-MFS-23551-1] c04 N76-26175
Control means for a solid state crossbar switch
[NASA-CASE-NPO-15066-1] c33 N80-33679
Power factor control system for ac induction
motors
[NASA-CASE-MFS-23988-1] c33 N81-27395
- CONTROL BOARDS**
Ionization control system design for monitoring
separately located ion gage pressures on
vacuum chambers
[NASA-CASE-XLE-00787] c14 N71-21090
- CONTROL DATA (COMPUTERS)**
Computer interface system
[NASA-CASE-NPO-13428-1] c60 N77-12721
- CONTROL EQUIPMENT**
Stepping motor control apparatus exciting
windings in proper time sequence to cause
motor to rotate in either direction
- [NASA-CASE-GSC-10366-1] c10 N71-18772
Voltage drift compensation circuit for
analog-to-digital converter
[NASA-CASE-XNP-04780] c08 N71-19687
Development of attitude control system for
vertical takeoff aircraft using reaction
nozzles displaced from various axes of aircraft
[NASA-CASE-XAC-08972] c02 N71-20570
Device for controlling rotary potentiometer
mounted on aircraft steering wheel or aileron
control
[NASA-CASE-XAC-10019] c15 N71-23809
Controlled release device for use in launching
rockets or missiles
[NASA-CASE-XKS-03338] c15 N71-24043
Circuits for controlling reversible dc motor
[NASA-CASE-XNP-07477] c09 N71-26092
Digital memory system with multiple switch cores
for driving each word location
[NASA-CASE-XNP-01466] c10 N71-26434
Fluid control jet amplifiers
[NASA-CASE-XLE-09341] c12 N71-28741
System for control of variable signal generator
[NASA-CASE-NFO-11064] c07 N72-11150
Solid state remote circuit selector switching
circuit
[NASA-CASE-LEW-10387] c09 N72-22201
Development of device for simulating charge and
discharge cycle of battery in synchronous orbit
[NASA-CASE-GSC-11211-1] c03 N72-25020
Bridge-type gain control circuit
[NASA-CASE-GSC-10786-1] c10 N72-28241
Interferometer prism and control system for
precisely determining direction to remote
light source
[NASA-CASE-ARC-10278-1] c14 N73-25463
Digital controller for a Baum folding machine
--- providing automatic counting and machine
shutoff
[NASA-CASE-LAR-10688-1] c37 N74-21056
Flow control valve --- for high temperature fluids
[NASA-CASE-NFO-11951-1] c37 N74-21065
Variable ratio mixed-mode bilateral master-slave
control system for shuttle remote manipulator
system
[NASA-CASE-MSC-14245-1] c18 N75-27041
Anthropomorphic master/slave manipulator system
[NASA-CASE-ARC-10756-1] c54 N77-32721
Power factor control system for AC induction
motors
[NASA-CASE-MFS-23280-1] c33 N78-10376
Variable cycle gas turbine engines
[NASA-CASE-LEW-12916-1] c37 N78-17384
Control for nuclear thermionic power source
[NASA-CASE-NPO-13114-2] c73 N78-28913
Illumination control apparatus for compensating
solar light
[NASA-CASE-KSC-11010-1] c74 N79-12890
Means for controlling aerodynamically induced
twist --- equipment to control twisting of
slender wings due to aerodynamic loads
[NASA-CASE-LAR-12175-1] c05 N80-16055
Dual acting slit control mechanism
[NASA-CASE-LAR-11370-1] c35 N80-28686
Pneumatic inflatable end effector
[NASA-CASE-MFS-23696-1] c54 N81-26718
Method and apparatus for precision control of
radiometer
[NASA-CASE-NPO-15398-1] c35 N81-33449
- CONTROL ROCKETS**
Unit for generating thrust from catalytic
decomposition of hydrogen peroxide, for high
altitude aircraft or spacecraft reaction control
[NASA-CASE-XMS-00583] c28 N70-38504
- CONTROL RODS**
Manual control mechanism for adjusting control
rod to null position
[NASA-CASE-XLA-01808] c15 N71-20740
- CONTROL SIMULATION**
Helmet weight simulator
[NASA-CASE-LAR-12320-1] c54 N81-27806
- CONTROL STABILITY**
Apparatus for sensor failure detection and
correction in a gas turbine engine control
system
[NASA-CASE-LEW-12907-2] c07 N81-19115
- CONTROL SURFACES**
Conical valve plug for use with reactive
cryogenic fluids

- [NASA-CASE-XLE-00715] c15 N70-34859
Attitude control system for spacecraft based on
conversion of incident solar radiation on
movable control surfaces into mechanical torques
[NASA-CASE-XNP-02982] c31 N70-41855
Vortex-lift roll-control device
[NASA-CASE-LAR-11868-2] c08 N79-14108
Aerodynamic side-force alleviator means
[NASA-CASE-LAR-12326-1] c02 N81-14568
Thermal barrier pressure seal --- shielding
junctions between spacecraft control surfaces
and structures
[NASA-CASE-MSC-18134-1] c37 N81-15363
- CONTROL UNITS (COMPUTERS)**
Self testing and repairing computer comprising
control and diagnostic unit and rollback
points for error correction
[NASA-CASE-NPO-10567] c08 N71-24633
- CONTROL VALVES**
Electromechanical actuator and its use in rocket
thrust control valve
[NASA-CASE-XNP-05975] c15 N69-23185
Multiple orifice fluid flow control valve to
provide different flow patterns
[NASA-CASE-ERC-10208] c15 N70-10867
Conical valve plug for use with reactive
cryogenic fluids
[NASA-CASE-XLE-00715] c15 N70-34859
Control valve and coaxial variable injector for
controlling bipropellant mixture ratio and flow
[NASA-CASE-XNP-09702] c15 N71-17654
Control valve for switching main stream of fluid
from one stable position to another by means
of electrohydrodynamic forces
[NASA-CASE-NPO-10416] c12 N71-27332
Force balanced throttle valve for fuel control
in rocket engines
[NASA-CASE-NPO-10808] c15 N71-27432
Dual stage check valve for cryogenic supply
systems used in space flight environmental
control system
[NASA-CASE-MSC-13587-1] c15 N73-30459
Airflow control system for supersonic inlets
[NASA-CASE-LEW-11188-1] c02 N74-20646
Ultrasonically bonded valve assembly
[NASA-CASE-NPO-13360-1] c37 N75-25185
Pressure modulating valve
[NASA-CASE-MSC-14905-1] c37 N77-28487
Fluid valve assembly
[NASA-CASE-MSC-12731-1] c37 N78-25426
Flow diverter valve and flow diversion method
[NASA-CASE-HQN-00573-1] c37 N79-33468
Quartz ball valve
[NASA-CASE-NPO-14473-1] c37 N80-23654
Pressure control valve --- inflating flexible
bladders
[NASA-CASE-ARC-11251-1] c37 N81-17433
Electrical servo actuator bracket --- fuel
control valves on jet engines
[NASA-CASE-FRC-11044-1] c37 N81-33483
- CONTROLLED ATMOSPHERES**
Rectangular electric conductors for conductor
cables to withstand spacecraft vibration and
controlled atmosphere
[NASA-CASE-MFS-14741] c09 N70-20737
High voltage pulse generator for testing flash
and ignition limits of nonmetallic materials
in controlled atmospheres
[NASA-CASE-MSC-12178-1] c09 N71-13518
System for continuous monitoring of exhalations,
weighing, and cage cleaning for animal exposed
to controlled atmosphere for toxic study
[NASA-CASE-XAC-05333] c11 N71-22875
- CONTROLLERS**
Unitary three-axis controller for flight
vehicles within or outside atmosphere
[NASA-CASE-XPR-00181] c21 N70-33279
Two axis flight controller with potentiometer
control shafts directly coupled to rotatable
ball members
[NASA-CASE-XPR-04104] c03 N70-42073
Hand controller operable about three
respectively perpendicular axes and capable of
actuating signal generators for attitude
control devices
[NASA-CASE-XMS-07487] c15 N71-23255
Solid state controller three axes controller
[NASA-CASE-MSC-12394-1] c08 N74-10942
- Wide power range microwave feedback controller
[NASA-CASE-GSC-12146-1] c33 N78-32340
Active nutation controller
[NASA-CASE-GSC-12273-1] c35 N80-21719
Phase-angle controller for Stirling engines
[NASA-CASE-NPO-14388-1] c37 N81-17432
Controller for computer control of brushless dc
motors --- automobile engines
[NASA-CASE-NPO-13970-1] c33 N81-20352
Method and apparatus for precision control of
radiometer
[NASA-CASE-NPO-15398-1] c35 N81-33449
- CONVECTIVE FLOW**
Design and development of device to prevent
geysering during convective circulation of
cryogenic fluids
[NASA-CASE-KSC-10615] c15 N73-12486
- CONVECTIVE HEAT TRANSFER**
Thin film gauge --- for measuring convective
heat transfer rates along test surfaces in
wind tunnels
[NASA-CASE-NPO-10617-1] c35 N74-22095
- CONVERGENCE**
Electrical device for developing converging
spherical shock waves
[NASA-CASE-MFS-20890] c14 N72-22439
- CONVERGENT NOZZLES**
Nozzle extraction process and handmeter for
measuring handle
[NASA-CASE-LAR-12147-1] c31 N79-11246
- CONVERGENT-DIVERGENT NOZZLES**
Gimbaled partially submerged nozzle for solid
propellant rocket engines for providing
directional control
[NASA-CASE-XNP-01544] c28 N70-34162
Regenerative cooling system for rocket
combustion chamber using coolant tubes in
convergent-divergent nozzle
[NASA-CASE-XLE-04857] c28 N71-23968
Aircraft engine nozzle
[NASA-CASE-ARC-10977-1] c07 N80-32392
- CONVERTERS**
Scan converting video tape recorder
[NASA-CASE-NPO-10166-2] c35 N76-16391
- CONVEYORS**
System for refurbishing and processing parachutes
[NASA-CASE-KSC-11042-1] c02 N81-14967
System and method for refurbishing and
processing parachutes --- monorial conveyor
system
[NASA-CASE-KSC-11042-2] c02 N81-26073
- COOLING**
Microwave power receiving antenna solving heat
dissipation problems by construction of
elements as heat pipe devices
[NASA-CASE-MFS-20333] c09 N71-13486
Dissipative voltage regulator system for
minimizing heat dissipation
[NASA-CASE-GSC-10891-1] c10 N71-26626
Cooling and radiation protection of ruby lasers
using copper sulfate solution in alcohol
[NASA-CASE-MFS-20180] c16 N72-12440
Compact pulsed laser having improved heat
conductance
[NASA-CASE-NPO-13147-1] c36 N77-25502
Heating and cooling system --- for fatigue test
specimens
[NASA-CASE-LAR-12393-1] c39 N80-25693
Heat pipe cooled probe
[NASA-CASE-LAR-12588-1] c44 N81-24525
- COOLING SYSTEMS**
Automatic thermal switch for improving
efficiency of cooling gases below 40 K
[NASA-CASE-XNP-03796] c23 N71-15467
Differential thermopile for measuring cooling
water temperature rise
[NASA-CASE-XAC-00812] c14 N71-15598
Electric power system with circulatory liquid
coolant cooling system
[NASA-CASE-MFS-14114-2] c09 N71-24807
Portable cryogenic cooling system design
including turbine pump, cooling chamber, and
atomizer
[NASA-CASE-NPO-10467] c23 N71-26654
Development and characteristics of natural
circulation radiator for use with nuclear
power plants installed in lunar space stations
[NASA-CASE-XHQ-03673] c33 N71-29046

- Development and characteristics of cooling system to maintain temperature of rack mounted electronic modules
[NASA-CASE-MSC-12389] c33 N71-29052
- Development of method for cooling high temperature wall members with cooling medium having high heat absorption capability
[NASA-CASE-HQN-00938] c33 N71-29053
- Apparatus for liquid spray cooling of turbine blades
[NASA-CASE-XLE-00027] c33 N71-29152
- Radial heat flux transformer for use in heating and cooling processes
[NASA-CASE-NPO-10828] c33 N72-17948
- Light shield and cooling apparatus --- high intensity ultraviolet lamp
[NASA-CASE-LAR-10089-1] c34 N74-23066
- Refrigerated coaxial coupling --- for microwave equipment
[NASA-CASE-NPO-13504-1] c33 N75-30430
- Rocket chamber and method of making
[NASA-CASE-LEW-11118-2] c20 N76-14191
- Tubular sublimatory evaporator heat sink
[NASA-CASE-ARC-10912-1] c34 N77-19353
- Arc control in compact arc lamps
[NASA-CASE-NPO-10870-1] c33 N77-22386
- Oil cooling system for a gas turbine engine
[NASA-CASE-LEW-12830-1] c07 N77-23106
- Oil cooling system for a gas turbine engine
[NASA-CASE-LEW-12321-1] c37 N78-10467
- Closed loop spray cooling apparatus --- for particle accelerator targets
[NASA-CASE-LEW-11981-1] c31 N78-17237
- Multistation refrigeration system
[NASA-CASE-NPO-13839-1] c31 N78-25256
- Cooling system for removing metabolic heat from an hermetically sealed spacesuit
[NASA-CASE-ARC-11059-1] c54 N78-32721
- Heat exchanger --- rocket combustion chambers and cooling systems
[NASA-CASE-LEW-12252-1] c34 N79-13288
- Closed loop spray cooling apparatus
[NASA-CASE-LEW-11981-2] c34 N79-20336
- Ozonation of cooling tower waters
[NASA-CASE-NPO-14340-1] c45 N80-14579
- Heat exchanger and method of making
[NASA-CASE-LEW-12441-3] c44 N81-24519
- Heat pipe cooled probe
[NASA-CASE-LAR-12588-1] c44 N81-24525
- Cooling system for high speed aircraft
[NASA-CASE-LAR-12406-1] c05 N81-26114
- Waveguide cooling system
[NASA-CASE-NPO-15401-1] c33 N81-29344
- COORDINATES**
- Mechanical coordinate converter for use with spacecraft tracking antennas
[NASA-CASE-XNP-00614] c14 N70-36907
- System for locating lightning strokes by coordination of directional antenna signals
[NASA-CASE-KSC-10729-1] c09 N73-32110
- Magnetic heading reference
[NASA-CASE-LAR-11387-2] c04 N77-19056
- COPOLYMERS**
- Method for producing alternating ether-siloxane copolymers with stable properties when exposed to elevated temperatures and UV radiation
[NASA-CASE-XNP-02584] c06 N71-20905
- Preparation of dicyanoacetylene and vinylidene copolymers using organic compounds
[NASA-CASE-XNP-03250] c06 N71-23500
- Heat resistant polymers of oxidized styrylphosphine
[NASA-CASE-MSC-14903-3] c27 N80-24438
- Insoluble polyelectrolyte and ion-exchange hollow fiber impregnated therewith
[NASA-CASE-NPO-13530-1] c25 N81-17187
- Alkaline battery containing a separator of a cross-linked copolymer of vinyl alcohol and unsaturated carboxylic acid
[NASA-CASE-LEW-11102-1] c44 N81-29531
- COPPER**
- Development of method for etching copper
[NASA-CASE-XGS-06306] c17 N71-16044
- Method of plating copper on aluminum to permit conventional soldering of structural aluminum bodies
[NASA-CASE-XLA-08966-1] c17 N71-25903
- Brazing alloy composition
[NASA-CASE-XMP-06053] c26 N75-27126
- Method for making an aluminum or copper substrate panel for selective absorption of solar energy
[NASA-CASE-MFS-23518-1] c44 N79-11469
- COPPER ALLOYS**
- Zirconium modified nickel-copper alloy
[NASA-CASE-LEW-12245-1] c26 N77-20201
- COPPER COMPOUNDS**
- Gallium arsenide solar cell preparation by surface deposition of cuprous iodide on thin n-type polycrystalline layers and heating in iodine vapor
[NASA-CASE-XNP-01960] c09 N71-23027
- Cooling and radiation protection of ruby lasers using copper sulfate solution in alcohol
[NASA-CASE-MFS-20180] c16 N72-12440
- Brazing alloy
[NASA-CASE-XNP-03878] c26 N75-27127
- COPPER FLUORIDES**
- Method to produce high purity copper fluoride by heating copper hydroxyfluoride powder and subjecting to flowing fluorine gas
[NASA-CASE-LEW-10794-1] c06 N72-17093
- CORDAGE**
- Fabrication of root cord restrained fabric suit sections from sheets of fabric
[NASA-CASE-MSC-12398] c05 N72-20098
- CORE STORAGE**
- Memory device employing semiconductor and ferroelectric properties of single crystal barium titanate
[NASA-CASE-REC-10307] c08 N72-21198
- CORES**
- Method of making rolling element bearings
[NASA-CASE-LEW-11087-2] c37 N74-15128
- Electromagnetic transducer recording head having a laminated core section and tapered gap
[NASA-CASE-NFO-10711-1] c35 N77-21392
- CORK (MATERIALS)**
- Cork-resin ablative insulation for complex surfaces and method for applying the same
[NASA-CASE-MFS-23626-1] c24 N80-26388
- CORRECTION**
- Doppler frequency shift correction device for multiplex communication with Applications Technology Satellites
[NASA-CASE-IGS-02749] c07 N69-39978
- CORRELATION DETECTION**
- Correlation type phase detector --- with time correlation integrator for frequency multiplexed signals
[NASA-CASE-GSC-11744-1] c33 N75-26243
- Clutter free synthetic aperture radar correlator
[NASA-CASE-NPO-14035-1] c32 N78-18266
- Interferometric locating system
[NASA-CASE-NPO-14173-1] c04 N80-32359
- CORRELATORS**
- Synchronous detection system for detecting weak radio astronomical signals
[NASA-CASE-XNP-09832] c30 N71-23723
- Digital demodulator-correlator
[NASA-CASE-NFO-13982-1] c32 N79-14267
- Serial data correlator/code translator
[NASA-CASE-KSC-11025-1] c32 N79-28383
- Baseband signal combiner for large aperture antenna array
[NASA-CASE-NFO-14641-1] c32 N81-29308
- CORROSION PREVENTION**
- Vapor deposited laminated nitride-silicon coating for corrosion prevention of carbonaceous surfaces
[NASA-CASE-XLA-00284] c15 N71-16075
- Method to prevent stress corrosion cracking in titanium alloys
[NASA-CASE-NFO-10271] c17 N71-16393
- Method and apparatus for inducing compressive stresses in pressure vessel to prevent stress corrosion
[NASA-CASE-XLA-07390] c15 N71-18616
- Development of fluoride coating to prevent oxidation of beryllium surfaces at elevated temperatures
[NASA-CASE-LEW-10327] c17 N71-33408
- Prevention of hydrogen embrittlement of high strength steel by hydrazine compositions --- by adding potassium hydroxide to hydrazine
[NASA-CASE-NFO-12122-1] c24 N76-14203
- Ozonation of cooling tower waters
[NASA-CASE-NPO-14340-1] c45 N80-14579

CORROSION RESISTANCE

High strength, corrosion resistant cobalt-based alloys for aerospace structures
[NASA-CASE-XLE-00726] c17 N71-15644

Hydrazine monoperfluoro alkanoate solder flux leaving corrosion resistant coating, for metals such as copper
[NASA-CASE-INP-03459-2] c18 N71-15688

High temperature cobalt-base alloy resistant to corrosion by liquid metals and to sublimation in vacuum environment
[NASA-CASE-XLE-02991] c17 N71-16025

Metal soldering with hydrazine monoperfluoro alkanoate for corrosion resistant coatings
[NASA-CASE-INP-03459] c15 N71-21078

Method of making bearing material
[NASA-CASE-LEW-11930-3] c24 N80-33482

Corrosion resistant thermal barrier coating --- protecting gas turbines and other engine parts
[NASA-CASE-LEW-13088-1] c26 N81-25188

Sandblasting nozzle
[NASA-CASE-NPO-13823-1] c37 N81-25371

CORRUGATED PLATES

Superplastically formed diffusion bonded metallic structure
[NASA-CASE-FRC-11026-1] c39 N79-25424

CORRUGATING

Collapsible corrugated horn antenna
[NASA-CASE-LAR-11745-1] c32 N80-29539

COSINE SERIES

Service life of electromechanical device for generating sine/cosine functions
[NASA-CASE-LAR-10503-1] c09 N72-21248

Function generators for producing complex vibration mode patterns used to identify vibration mode data
[NASA-CASE-LAR-10310-1] c10 N73-20253

COSMIC DUST

Sensor for detecting and measuring energy, velocity and direction of travel of a cosmic dust particle
[NASA-CASE-GSC-10503-1] c14 N72-20381

System for detecting impact position of cosmic dust on detector surface
[NASA-CASE-GSC-11291-1] c25 N72-33696

Impact position detector for outer space particles
[NASA-CASE-GSC-11829-1] c35 N75-27331

Cosmic dust analyzer
[NASA-CASE-MSC-13802-2] c35 N76-15431

COST ANALYSIS

Low cost solar energy collection system
[NASA-CASE-NPO-13579-1] c44 N78-17460

COST REDUCTION

An improved synthesis of 2,4,8,10-tetroxaspiro (5.5) undecane
[NASA-CASE-ARC-11243-2] c23 N80-31472

COUCHES

Shock absorbing couch for body support under high acceleration or deceleration forces
[NASA-CASE-XMS-01240] c05 N70-35152

Low onset rate energy absorber in form of strut assembly for crew couch of Apollo command module
[NASA-CASE-MSC-12279-1] c15 N70-35679

Shock absorbing articulated multiple couch assembly
[NASA-CASE-MSC-11253] c05 N71-12343

Collapsible couch system for manned space vehicles
[NASA-CASE-MSC-13140] c05 N72-11085

COULOMETERS

Alkaline-type coulometer cell for primary charge control in secondary battery recharge circuits
[NASA-CASE-XGS-05434] c03 N71-20491

Development and characteristics of battery charging circuits with coulometer for control of available current
[NASA-CASE-GSC-10487-1] c03 N71-24719

COUNTERS

Circuit for measuring wide range of pulse rates by utilizing high capacity counter
[NASA-CASE-INP-06234] c10 N71-27137

Electronic strain level counter on in-flight aircraft
[NASA-CASE-LAR-10756-1] c32 N73-26910

Electrochemical detection device --- for use in microbiology
[NASA-CASE-LAR-11922-1] c25 N79-24073

Film advance indicator
[NASA-CASE-LAR-12474-1] c35 N80-31774

Redundant operation of counter modules

[NASA-CASE-NFO-14162-1] c60 N81-15706

Apparatus and process for microbial detection and enumeration
[NASA-CASE-LAR-12709-1] c51 N81-29727

COUNTING CIRCUITS

Rocket-borne aspect sensor consisting of radiation sensor, apertured disk, commutator, and counting circuits
[NASA-CASE-XGS-08266] c14 N69-27432

Design of transistorized ring counter circuit with special steering and triggering circuits
[NASA-CASE-XGS-03095] c09 N69-27463

Counter-divider circuit for accuracy and reliability in binary circuits
[NASA-CASE-INP-00421] c09 N70-34502

Reversible ring counter using cascaded single silicon controlled rectifier stages
[NASA-CASE-XGS-01473] c09 N71-10673

Capacitor sandwich structure containing metal sheets of known thickness for counting penetration rates of meteoroids
[NASA-CASE-XLE-01246] c14 N71-10797

Electronic counter circuit utilizing magnetic core and low power consumption
[NASA-CASE-INP-08836] c09 N71-12515

Synchronous counter design incorporating cascaded binary stages driven by previous stages and inputs through NAND gates
[NASA-CASE-XGS-02440] c08 N71-19432

Digital cardiometer incorporating circuit for measuring heartbeat rate of subject over predetermined portion of one minute also converting rate to beats per minute
[NASA-CASE-XMS-02399] c05 N71-22896

Computer circuit performing both counting and shifting logic operations also capable of miniaturization and integration in basic circuits
[NASA-CASE-XNP-01753] c08 N71-22897

Noninterruptable digital counter circuit design with display device for pulse frequency modulation
[NASA-CASE-XNP-09759] c08 N71-24891

Frequency measurement by coincidence detection with standard frequency
[NASA-CASE-MSC-14649-1] c33 N76-16331

Redundant operation of counter modules
[NASA-CASE-NFO-14162-1] c60 N81-15706

COUPLING

Coupling device for linear shaped charge for space vehicle abort system
[NASA-CASE-XLA-00189] c33 N70-36846

Base support for expandable and contractible coupling between two members
[NASA-CASE-NPO-11059] c15 N72-17454

COUPLING CIRCUITS

Interrogator and current driver circuit for combination with transistor flip-flop circuit
[NASA-CASE-XGS-03058] c10 N71-19547

Antenna array at focal plane of reflector with coupling network for beam switching
[NASA-CASE-GSC-10220-1] c07 N71-27233

Phase modulator with tuned variable length electrical lines including coupling and varactor diode circuits
[NASA-CASE-MSC-13201-1] c07 N71-28429

High efficiency transformerless amplitude modulator coupled to RF power amplifier
[NASA-CASE-GSC-10668-1] c07 N71-28430

Automatic quadrature control and measuring system --- using optical coupling circuitry
[NASA-CASE-MPS-21660-1] c35 N74-21017

Diode-quad bridge circuit means
[NASA-CASE-ARC-10364-3] c33 N75-19520

Non-contacting power transfer device
[NASA-CASE-GSC-12595-1] c33 N81-12331

COUPLINGS

Releasable coupling device designed to receive and retain matching ends of electrical connectors
[NASA-CASE-XMS-07846-1] c09 N69-21927

Stage separation using remote control release of joint with explosive insert
[NASA-CASE-XLA-02854] c15 N69-27490

Space vehicle stage coupling and quick release separation mechanism
[NASA-CASE-XLA-01441] c15 N70-41679

- Standard coupling design for mass production
[NASA-CASE-XMS-02532] c15 N70-41808
- Quick-release coupling for fueling rocket vehicles with cryogenic propellants
[NASA-CASE-XKS-01985] c15 N71-10782
- Ratchet mechanism for high speed operation at reduced backlash
[NASA-CASE-MPS-12805] c15 N71-17805
- Split nut and bolt separation device
[NASA-CASE-XNP-06914] c15 N71-21489
- Quick disconnect duct coupling device for single-handed operation
[NASA-CASE-MPS-20395] c15 N71-24903
- Coupling arrangement for isolating torque loads from axial, radial, and bending loads
[NASA-CASE-XLA-04897] c15 N72-22482
- Refrigerated coaxial coupling --- for microwave equipment
[NASA-CASE-NPO-13504-1] c33 N75-30430
- Opto-mechanical subsystem with temperature compensation through isothermal design
[NASA-CASE-GSC-12059-1] c35 N77-27366
- Prosthesis coupling
[NASA-CASE-KSC-11069-1] c52 N79-26772
- Coupling device for moving vehicles
[NASA-CASE-GSC-12322-1] c37 N80-14398
- Device for coupling a first vehicle to a second vehicle
[NASA-CASE-GSC-12429-1] c37 N81-14320
- Micro-fluid exchange coupling apparatus
[NASA-CASE-ARC-11114-1] c51 N81-14605
- COVERINGS**
Apparatus for ejecting covers of instrument packages using differential pressure principle
[NASA-CASE-XNP-04132] c15 N69-27502
- CRACKING (FRACTURING)**
Method to prevent stress corrosion cracking in titanium alloys
[NASA-CASE-NPO-10271] c17 N71-16393
- TV fatigue crack monitoring system
[NASA-CASE-LAR-11490-1] c39 N78-16387
- CRASH LANDING**
Aircraft-mounted crash-activated transmitter device
[NASA-CASE-MPS-16609-3] c03 N76-32140
- CREEP RUPTURE STRENGTH**
Nickel base alloy with resistance to oxidation at high temperatures and superior stress-rupture properties
[NASA-CASE-XLE-02082] c17 N71-16026
- CRITICAL EXPERIMENTS**
Apparatus and process for volumetrically dispensing reagent quantities of volatile chemicals for small batch reactions
[NASA-CASE-NPO-10070] c15 N71-27372
- CRITICAL TEMPERATURE**
Stable superconducting magnet --- high current levels below critical temperature
[NASA-CASE-XNP-05373-1] c33 N79-21264
- CROSS CORRELATION**
Cross correlation anomaly detection system
[NASA-CASE-NPO-13283] c38 N78-17395
- CROSS FLOW**
Aerodynamic side-force alleviator means
[NASA-CASE-LAR-12326-1] c02 N81-14568
- CROSS POLARIZATION**
Adaptive polarization separation
[NASA-CASE-LAR-12196-1] c33 N81-26358
- CROSSED FIELDS**
Crossed-field plasma accelerator for laboratory simulation of atmospheric reentry conditions
[NASA-CASE-XLA-00675] c25 N70-33267
- Direct conversion of thermal energy into electrical energy using crossed electric and magnetic fields
[NASA-CASE-XLE-00212] c03 N70-34134
- Crossed field MHD plasma generator-accelerator
[NASA-CASE-XLA-03374] c25 N71-15562
- CROSSLINKING**
New trifunctional alcohol derived from trimer acid and novel method of preparation
[NASA-CASE-NPO-10714] c06 N69-31244
- Trimerization of aromatic nitriles
[NASA-CASE-LEW-12053-1] c27 N78-15276
- Polymeric foams from cross-linkable poly-n-arylenebenzimidazoles
[NASA-CASE-ARC-11008-1] c27 N78-31232
- In situ self cross-linking of polyvinyl alcohol battery separators
[NASA-CASE-LEW-12972-1] c44 N79-25481
- Catalytic trimerization of aromatic nitriles and triaryl-s-triazine ring cross-linked high temperature resistant polymers and copolymers made thereby
[NASA-CASE-LEW-12053-2] c27 N79-28307
- Method of cross-linking polyvinyl alcohol and other water soluble resins
[NASA-CASE-LEW-13103-1] c27 N80-32516
- Thermoset-thermoplastic aromatic polyamides
[NASA-CASE-LAR-12723-1] c27 N81-15107
- Process for the preparation of fluorine containing crosslinked elastomeric polytriazine and product so produced
[NASA-CASE-ARC-11248-1] c27 N81-17259
- The 1,2,4-oxadiazole elastomers --- heat resistant polymers
[NASA-CASE-ARC-11253-1] c27 N81-17262
- In-situ cross linking of polyvinyl alcohol --- application to battery separator films
[NASA-CASE-LEW-13135-2] c27 N81-24257
- Cross-linked polyvinyl alcohol and method of making same
[NASA-CASE-LEW-13504-1] c27 N81-27279
- Cross-linked polyvinyl alcohol and method of making same
[NASA-CASE-LEW-13101-2] c23 N81-29160
- Alkaline battery containing a separator of a cross-linked copolymer of vinyl alcohol and unsaturated carboxylic acid
[NASA-CASE-LEW-13102-1] c44 N81-29531
- CRUCIBLES**
Evaporating crucible of tantalum-tungsten foil, nickel alumina bonding agent, and ceramic coating
[NASA-CASE-XLA-03105] c15 N69-27483
- CRUCIFORM WINGS**
Solar powered aircraft
[NASA-CASE-LAR-12615-1] c05 N81-32138
- CRUDE OIL**
Decontamination of petroleum products with honey
[NASA-CASE-XNP-03835] c06 N71-23499
- CRUSTAL FRACTURES**
System for real-time crustal deformation monitoring
[NASA-CASE-NPO-14124-1] c46 N80-14603
- CRYOGENIC COOLING**
Support assembly for cryogenically coolable low-noise choke waveguide
[NASA-CASE-NFO-14253-1] c32 N80-32605
- Low cost cryostat
[NASA-CASE-NFO-14513-1] c35 N81-14287
- Refrigerator module, system and process --- regenerative, cryogenic cooling of an infrared radiation detection system
[NASA-CASE-ARC-11263-1] c31 N81-27328
- CRYOGENIC EQUIPMENT**
Gas balancing, cryogenic refrigeration apparatus with Joule-Thomson valve assembly
[NASA-CASE-NFO-10309] c15 N69-23190
- Low thermal loss piping arrangement for moving cryogenic media through double chamber structure
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- Method and apparatus for removing plastic insulation from wire using cryogenic equipment
[NASA-CASE-MPS-10340] c15 N71-17628
- Dual solid cryogenics for spacecraft refrigeration insuring low temperature cooling for extended periods
[NASA-CASE-GSC-10188-1] c23 N71-24725
- Reliability of automatic refilling valving device for cryogenic liquid systems
[NASA-CASE-NPO-11177] c15 N72-17453
- Dual stage check valve for cryogenic supply systems used in space flight environmental control system
[NASA-CASE-MSC-13587-1] c15 N73-30459
- Heat operated cryogenic electrical generator
[NASA-CASE-NFO-13303-1] c20 N75-24837
- Cryostat system for temperatures on the order of 2 deg K or less
[NASA-CASE-NFO-13459-1] c31 N77-10229
- Device for tensioning test specimens within an hermetically sealed chamber
[NASA-CASE-MPS-23281-1] c35 N77-22450
- Multistatic refrigeration system
[NASA-CASE-NFO-13839-1] c31 N78-25256
- System for and method of freezing biological tissue

- Standard coupling design for mass production
[NASA-CASE-XMS-02532] c15 N70-41808
- Quick-release coupling for fueling rocket vehicles with cryogenic propellants
[NASA-CASE-XKS-01985] c15 N71-10782
- Ratchet mechanism for high speed operation at reduced backlash
[NASA-CASE-MFS-12805] c15 N71-17805
- Split nut and bolt separation device
[NASA-CASE-XNP-06914] c15 N71-21489
- Quick disconnect duct coupling device for single-handed operation
[NASA-CASE-MFS-20395] c15 N71-24903
- Coupling arrangement for isolating torque loads from axial, radial, and bending loads
[NASA-CASE-XLA-04897] c15 N72-22482
- Refrigerated coaxial coupling --- for microwave equipment
[NASA-CASE-NPO-13504-1] c33 N75-30430
- Opto-mechanical subsystem with temperature compensation through isothermal design
[NASA-CASE-GSC-12059-1] c35 N77-27366
- Prosthesis coupling
[NASA-CASE-KSC-11069-1] c52 N79-26772
- Coupling device for moving vehicles
[NASA-CASE-GSC-12322-1] c37 N80-14398
- Device for coupling a first vehicle to a second vehicle
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[NASA-CASE-NFO-13459-1] c31 N77-10229
- Device for tensioning test specimens within an hermetically sealed chamber
[NASA-CASE-MFS-23281-1] c35 N77-22450
- Multistatic refrigeration system
[NASA-CASE-NPO-13839-1] c31 N78-25256
- System for and method of freezing biological tissue

- [NASA-CASE-GSC-12173-1] c51 N79-10694
Shock isolator for operating a diode laser on a closed-cycle refrigerator
[NASA-CASE-GSC-12297-1] c37 N79-28549
- CRYOGENIC FLUID STORAGE**
Apparatus for cryogenic liquid storage with heat transfer reduction and for liquid transfer at zero gravity conditions
[NASA-CASE-XLE-00345] c15 N70-38020
Cryogenic storage system for gases onboard spacecraft
[NASA-CASE-XMS-04390] c31 N70-41671
Carbon dioxide purge systems to prevent condensation in spaces between cryogenic fuel tanks and hypersonic vehicle skin
[NASA-CASE-XLA-01967] c31 N70-42015
Fabrication of filament wound propellant tank for cryogenic storage
[NASA-CASE-XLE-03803-2] c15 N71-17651
Prefabricated, multilayered self-evacuating insulation panels using gas with low vapor pressure at cryogenic temperatures for application to storage of cryogens
[NASA-CASE-XLE-04222] c23 N71-22881
Multilayer insulation panels for cryogenic liquid containers
[NASA-CASE-MFS-14023] c33 N71-25351
Development of thermal insulation material for insulating liquid hydrogen tanks in spacecraft
[NASA-CASE-XMF-05046] c33 N71-28892
Apparatus for aligning shadow shields and cryogenic storage tanks in outer space with the sun
[NASA-CASE-KSC-10622-1] c31 N72-21893
Heater-mixer for stored fluids
[NASA-CASE-ARC-10442-1] c35 N74-15093
Low heat leak connector for cryogenic system
[NASA-CASE-XLE-02367-1] c31 N79-21225
Cryogenic container compound suspension strap
[NASA-CASE-ARC-11157-1] c37 N80-18393
- CRYOGENIC FLUIDS**
Cryogenic flux-gated magnetometer using superconductors
[NASA-CASE-XAC-02407] c14 N69-27423
Fuel tank pressure-relief device for venting cryogenic liquid vapors through tubes with porous plug
[NASA-CASE-XLE-00288] c15 N70-34247
Conical valve plug for use with reactive cryogenic fluids
[NASA-CASE-XLE-00715] c15 N70-34859
Two component valve assembly for cryogenic liquid transfer regulation
[NASA-CASE-XLE-00397] c15 N70-36492
Measuring density of single and two-phase cryogenic fluids in rocket fuel tanks
[NASA-CASE-XLE-00688] c14 N70-41330
Leakproof soft metal seal for use in very high vacuum systems operating at cryogenic temperatures
[NASA-CASE-XGS-02441] c15 N70-41629
High pressure liquid flow sight assembly for wide temperature range applications including cryogenic fluids
[NASA-CASE-XLE-02998] c14 N70-42074
Automatic thermal switch for improving efficiency of cooling gases below 40 K
[NASA-CASE-XMF-03796] c23 N71-15467
Describing apparatus for separating gas from cryogenic liquid under zero gravity and for venting gas from fuel tank
[NASA-CASE-XLE-00586] c15 N71-15968
Development of apparatus for measuring thermal conductivity
[NASA-CASE-XGS-01052] c14 N71-15992
Method and apparatus for producing fine particles in cryogenic liquid bath for gelled rocket propellants
[NASA-CASE-NFO-10250] c23 N71-16212
Superconducting alternator design with cryogenic fluid for cooling windings below critical temperature
[NASA-CASE-XLE-02823] c09 N71-23443
Flow angle sensor and remote readout system for use with cryogenic fluids
[NASA-CASE-XLE-04503] c14 N71-24664
Design and development of device to prevent geysering during convective circulation of cryogenic fluids
- [NASA-CASE-KSC-10615] c15 N73-12486
Magnetocaloric pump --- for cryogenic fluids
[NASA-CASE-LEW-11672-1] c37 N74-27904
Cryogenic liquid sensor
[NASA-CASE-NFO-10619-1] c35 N77-21393
- CRYOGENIC GYROSCOPES**
Cryogenic gyroscope housing --- with annular disks for gas spin-up
[NASA-CASE-MFS-21136-1] c35 N74-18323
- CRYOGENIC MAGNETS**
Improved alternator with windings of superconducting materials acting as permanent magnet
[NASA-CASE-XLE-02824] c03 N69-39890
- CRYOGENIC ROCKET PROPELLANTS**
Quick-release coupling for fueling rocket vehicles with cryogenic propellants
[NASA-CASE-XKS-01985] c15 N71-10782
Hot-wire liquid level detector for cryogenic propellants
[NASA-CASE-XLE-00454] c23 N71-17802
Automatically reciprocating, high pressure pump for use in spacecraft cryogenic propellants
[NASA-CASE-XMF-04731] c15 N71-24042
- CRYOGENIC STORAGE**
Light weight plastic foam thermal insulation for cryogenic storage
[NASA-CASE-XLE-02647] c18 N71-23658
Development of foam insulation for filament wound cryogenic storage tank
[NASA-CASE-XLE-03803] c15 N71-23816
- CRYOGENIC WIND TUNNELS**
Continuous self-locking spiral wound seal --- for maintaining pressure between chambers in cryogenic wind tunnels
[NASA-CASE-LAB-12315-1] c37 N80-16339
- CRYOGENICS**
High strength aluminum casting alloy for cryogenic applications in aerospace engineering
[NASA-CASE-XMF-02786] c17 N71-20743
Portable cryogenic cooling system design including turbine pump, cooling chamber, and atomizer
[NASA-CASE-NFO-10467] c23 N71-26654
Germanium coated microbridge and method
[NASA-CASE-MFS-23274-1] c33 N78-13320
Dielectric-loaded waveguide circulator for cryogenically cooled and cascaded maser waveguide structures
[NASA-CASE-NFO-14254-1] c36 N80-18372
High toughness-high strength iron alloy
[NASA-CASE-LEW-12542-3] c26 N80-32484
Multispectral scanner optical system
[NASA-CASE-HSC-18255-1] c74 N80-33210
Polymeric compositions and their method of manufacture --- forming filled polymer systems using cryogenics
[NASA-CASE-NFO-10424-1] c27 N81-24258
- CRYOLITE**
Ultraviolet filter of thorium fluoride and cryolite on quartz base
[NASA-CASE-XMF-02340] c23 N69-24332
- CRYOSTATS**
Cryostat for flexure fatigue testing of composite materials
[NASA-CASE-XMF-02964] c14 N71-17659
Cryostat for use with horizontal fatigue testing machines at low temperatures
[NASA-CASE-XMF-10968] c14 N71-24234
Heater-mixer for stored fluids
[NASA-CASE-ARC-10442-1] c35 N74-15093
Cryostat system for temperatures on the order of 2 deg K or less
[NASA-CASE-NFO-13459-1] c31 N77-10229
Low cost cryostat
[NASA-CASE-NFO-14513-1] c35 N81-14287
- CRYOTRAPPING**
Atomic hydrogen storage --- cryotrapping and magnetic field strength
[NASA-CASE-LEW-12081-2] c28 N80-20402
- CRYSTAL DEFECTS**
Method of controlling defect orientation in silicon crystal ribbon growth
[NASA-CASE-NFO-13918-1] c76 N79-11920
- CRYSTAL FILTERS**
Infrared tunable dye laser with nonlinear wavelength mixing crystal in optical cavity
[NASA-CASE-ARC-10463-1] c09 N73-32111

Partial polarizer filter
[NASA-CASE-GSC-12225-1] c74 N79-14891

Inductorless narrow-band filter/amplifier
[NASA-CASE-GSC-12410-1] c33 N79-24260

CRYSTAL GROWTH

Device for producing high purity silicon carbide on carbon base by hydrogen reduction of silicon tetrachloride
[NASA-CASE-XLA-02057] c26 N70-40015

Electrodeposition method for producing crystalline material from dense gaseous medium
[NASA-CASE-NPO-10440] c15 N72-21466

Vapor phase growth of groups 3-5 compounds by hydrogen chloride transport of the elements
[NASA-CASE-LAR-11144-1] c25 N75-2643

Process for fabricating SiC semiconductor devices
[NASA-CASE-LBW-12094-1] c76 N76-25049

Method of crystallization --- in gravity-free environments
[NASA-CASE-MFS-23001-1] c76 N77-32919

Pressure transducer --- using a monomeric charge transfer complex sensor
[NASA-CASE-NPO-11150] c35 N78-17359

Method of controlling defect orientation in silicon crystal ribbon growth
[NASA-CASE-NPO-13918-1] c76 N79-11520

Growth of silicon carbide crystals on a seed while pulling silicon crystals from a melt
[NASA-CASE-NPO-13969-1] c76 N79-23798

Method of mitigating titanium impurities effects in p-type silicon material for solar cells
[NASA-CASE-NPO-14635-1] c44 N80-24741

Means for growing ribbon crystals without subjecting the crystals to thermal shock-induced strains
[NASA-CASE-NPO-14298-1] c76 N80-32244

Method of growing a ribbon crystal particularly suited for facilitating automated control of ribbon width
[NASA-CASE-NPO-14295-1] c76 N80-32245

Apparatus for use in the production of ribbon-shaped crystals from a silicon melt
[NASA-CASE-NPO-14297-1] c33 N81-19389

Electromigration process for the purification of molten silicon during crystal growth
[NASA-CASE-NPO-14831-1] c76 N81-19944

CRYSTAL LATTICES

Apparatus for use in examining the lattice of a semiconductor wafer by X-ray diffraction
[NASA-CASE-MFS-23315-1] c76 N78-24950

CRYSTAL OSCILLATORS

Describing crystal oscillator instrument for detecting condensable gas contaminants in vacuum apparatus
[NASA-CASE-NPO-10144] c14 N71-17701

Passive intrusion detection system
[NASA-CASE-NPO-13804-1] c33 N80-23559

CRYSTAL RECTIFIERS

Turn on current transient limiter for controlling peak current flow in high capacity load
[NASA-CASE-GSC-10413] c10 N71-26531

CRYSTAL STRUCTURE

Method of growing composites of the type exhibiting the Soret effect --- improved structure of eutectic alloy crystals
[NASA-CASE-MFS-22926-1] c24 N77-27187

CRYSTALLINITY

Crystalline polyimides --- reinforcing fibers for high temperature composites and adhesives as well as flame retardation
[NASA-CASE-LAR-12099-1] c27 N80-16158

CRYSTALLIZATION

Method of crystallization --- in gravity-free environments
[NASA-CASE-MFS-23001-1] c76 N77-32919

CRYSTALS

Brushless dc tachometer design with Hall effect crystals and output voltage magnitude proportional to rotor speed
[NASA-CASE-MFS-20385] c09 N71-24904

Method and apparatus for slicing crystals
[NASA-CASE-GSC-12291-1] c76 N80-18951

Crystal cleaving machine
[NASA-CASE-GSC-12584-1] c76 N80-32246

CUBES

Helmet weight simulator
[NASA-CASE-LAR-12320-1] c54 N81-27806

CULTURE TECHNIQUES

Development of variable angle device for positioning test tubes to permit optimum drying of culture medium
[NASA-CASE-LAR-10507-1] c11 N72-25284

Automatic inoculating apparatus --- includes movable carriage, drive motor, and swabbing motor
[NASA-CASE-LAR-11074-1] c51 N75-13502

Automatic microbial transfer device
[NASA-CASE-LAR-11354-1] c35 N75-27330

Electrochemical detection device --- for use in microbiology
[NASA-CASE-LAR-11922-1] c25 N79-24073

Indirect microbial detection
[NASA-CASE-LAR-12520-1] c51 N81-28698

Enhancement of in vitro Guayule propagation
[NASA-CASE-NPO-15213-1] c51 N81-29728

CURIE TEMPERATURE

Manganese bismuth films with narrow transfer characteristics for Curie-point switching
[NASA-CASE-NPO-11336-1] c76 N79-16678

CURING

Reaction cured glass and glass coatings
[NASA-CASE-ARC-11051-1] c27 N78-32260

Ambient cure polyimide foams --- thermal resistant foams
[NASA-CASE-ARC-11170-1] c27 N79-11215

Low temperature cross linking polyimides
[NASA-CASE-LBW-12876-1] c27 N80-26447

Curing agent for polyepoxides and epoxy resins and composites cured therewith --- preventing carbon fiber release
[NASA-CASE-LBW-13226-1] c27 N81-17260

Resin composition, process for producing the same, product produced therefrom and process for producing said product
[NASA-CASE-ARC-11331-1] c27 N81-31363

CURRENT DENSITY

Solid state switching circuit design to increase current capacity of low rated relay contacts
[NASA-CASE-XNP-09228] c09 N69-27500

Technique and equipment for sputtering using apertured electrode and pulsed substrate bias
[NASA-CASE-LBW-10920-1] c17 N73-24569

Stable superconducting magnet --- high current levels below critical temperature
[NASA-CASE-XNP-05373-1] c33 N79-21264

Catalyst surfaces for the chrous/chronic redox couple
[NASA-CASE-LBW-13148-2] c44 N81-29524

CURRENT DISTRIBUTION

Distribution of currents to circuits using electrical adaptor
[NASA-CASE-XLA-01288] c09 N69-21470

Electron bombardment ion rocket engine with improved propellant introduction system
[NASA-CASE-XLB-02066] c28 N71-15661

Reversible current directing circuitry for reversible motor control
[NASA-CASE-XLA-09371] c10 N71-18724

Electric circuit for reversing direction of current flow
[NASA-CASE-XNP-00952] c10 N71-23271

Load insensitive electrical device --- power converters for supplying direct current at one voltage from a source at another voltage
[NASA-CASE-XER-11046-2] c33 N74-22864

CURRENT REGULATORS

Apparatus for ballasting high frequency transistors
[NASA-CASE-XGS-05003] c09 N69-24318

Automatic baseline stabilization for ionization detector used in gas chromatograph
[NASA-CASE-XNP-03128] c10 N70-41991

Describing magnetic core current switching device for steering bipolar current pulses to memory units
[NASA-CASE-NPO-10201] c08 N71-18694

Switching series regulator with gating control network
[NASA-CASE-XNS-09352] c09 N71-23316

Magnetic current regulator for saturable core transformer
[NASA-CASE-BEC-10075] c09 N71-24800

Automatic power supply circuit design for driving inductive loads and minimizing power consumption including solenoid example
[NASA-CASE-NPO-10716] c09 N71-24892

Turn on current transient limiter for
controlling peak current flow in high capacity
load
[NASA-CASE-GSC-10413] c10 N71-26531

Current regulating voltage divider design with
load current shunting
[NASA-CASE-MPS-20935] c09 N71-34212

Circuit for monitoring power supply by ripple
current indication
[NASA-CASE-KSC-10162] c09 N72-11225

Inrush current limiter
[NASA-CASE-GSC-11789-1] c33 N77-14333

Circuit for automatic load sharing in parallel
converter modules
[NASA-CASE-NPO-14056-1] c33 N79-24257

Three phase power factor controller
[NASA-CASE-MPS-25535-1] c33 N81-12330

CURVATURE

Apparatus and method for spin forming tubular
elbows with high strength, uniform thickness,
and close tolerances
[NASA-CASE-XMF-01083] c15 N71-22723

Two degree inverted flexure from single block of
material
[NASA-CASE-ABC-10345-1] c15 N73-12488

CURVE FITTING

Simulating voltage-current characteristic curves
of solar cell panel with different operational
parameters
[NASA-CASE-XMS-01554] c10 N71-10578

CURVED PANELS

Fabrication of curved reflector segments for
solar mirror
[NASA-CASE-XLB-08917] c15 N71-15597

Method and apparatus for bowing of instrument
panels to improve radio frequency shielded
enclosure
[NASA-CASE-XMF-09422] c07 N71-19436

Space erectable rollup solar array of arcuate
solar panels furled on tapered drum for
spacecraft storage during launch
[NASA-CASE-NPO-10188] c03 N71-20273

Forming mold for polishing and machining curved
solar magnesium reflector with reinforcing ribs
[NASA-CASE-XLB-08917-2] c15 N71-24836

Variable contour securing system
[NASA-CASE-HSC-16270-1] c37 N78-27423

CUSHIONS

Seat cushion to provide realistic acceleration
cues to aircraft simulator pilot
[NASA-CASE-LAR-12149-2] c09 N79-31228

CUTTERS

Description of device for aligning stacked
sheets of paper for repetitive cutting
[NASA-CASE-XMS-04178] c15 N71-22798

Portable cutting machine for piping weld
preparation
[NASA-CASE-XKS-07953] c15 N71-26134

Precision surface cutter for screen circuit
negatives and other microcircuits
[NASA-CASE-XLA-05843] c15 N72-27485

Insert facing tool --- manually operated cutting
tool for forming studs in honeycomb material
[NASA-CASE-MPS-21485-1] c37 N74-25968

Grinding arrangement for ball nose milling cutters
[NASA-CASE-LAR-10450-1] c37 N74-27905

Ophthalmic liquifaction pump
[NASA-CASE-LRW-12051-1] c52 N75-33640

Coal-shale interface detection
[NASA-CASE-MPS-23720-3] c43 N79-25443

Open ended ratchet type tubing cutter
[NASA-CASE-HSC-18538-1] c37 N80-22703

System for slicing silicon wafers
[NASA-CASE-NPO-14406-1] c37 N80-29703

Crystal cleaving machine
[NASA-CASE-GSC-12584-1] c76 N80-32246

CUTTING

Ellipsograph for describing and cutting ellipses
with minimal axial dimensions
[NASA-CASE-XLA-03102] c14 N71-21079

Precision alignment apparatus for cutting a
workpiece
[NASA-CASE-LAR-11658-1] c37 N77-14478

Explosively activated egress area
[NASA-CASE-LAR-12624-1] c03 N81-29107

CYANATES

Catalysts for polyimide foams from aromatic
isocyanates and aromatic dianhydrides ---
flame retardant foams

[NASA-CASE-ABC-11107-1] c25 N80-16116

CYCLES

Pneumatic system for cyclic control of fluid
flow in pneumatic device
[NASA-CASE-XMS-04843] c03 N69-21469

Multistage feedback shift register with states
decomposable into cycles of equal length
[NASA-CASE-NPO-11082] c08 N72-22167

CYCLIC ACCELERATORS

Cyclical bi-directional rotary actuator
[NASA-CASE-GSC-11883-1] c37 N77-19458

CYCLIC HYDROCARBONS

Para-benzoquinone dioxide and concentrated
mineral acid processed to yield intumescent or
fire resistant, heat insulating materials
[NASA-CASE-ABC-10304-1] c18 N73-26572

CYCLIC LOADS

Automatic controlled thermal fatigue testing
apparatus
[NASA-CASE-XLA-02059] c33 N71-24276

Development of device for simulating cyclic
thermal loading of flexible materials by
application of mechanical stresses and
deformations
[NASA-CASE-LAR-10270-1] c32 N72-25877

Material testing system with load sensor for
applying and measuring cyclic tensile and
compressive loads to test specimens
[NASA-CASE-MPS-20673] c14 N73-20476

CYCLOTRON RADIATION

Targets for producing high purity I-123
[NASA-CASE-LRW-10518-3] c25 N78-27226

CYCLOTRON RESONANCE

Miniature cyclotron resonance ion source using
small permanent magnet
[NASA-CASE-NPO-14324-1] c72 N80-27163

CYCLOTRON RESONANCE DEVICES

Miniature cyclotron resonance ion source using
small permanent magnet
[NASA-CASE-NPO-14324-1] c72 N80-27163

Gyrottron transmitting tube
[NASA-CASE-LRW-13429-1] c33 N81-16384

CYLINDRICAL ANTENNAS

Variable beamwidth antenna --- with multiple
beam, variable feed system
[NASA-CASE-GSC-11862-1] c32 N76-18295

CYLINDRICAL BODIES

Apparatus for scanning the surface of a
cylindrical body
[NASA-CASE-NPO-11861-1] c36 N74-20009

Aerodynamic side-force alleviator means
[NASA-CASE-LAR-12326-1] c02 N81-14968

CYLINDRICAL CHAMBERS

Modified spiral wound retaining ring
[NASA-CASE-LAR-12361-1] c37 N81-12422

CYSTS

Coupling apparatus for ultrasonic medical
diagnostic system
[NASA-CASE-NPO-13935-1] c52 N79-14751

D

DAMPING

Dynamic precession damping of spin-stabilized
vehicles by using rate gyroscope and angular
accelerometer
[NASA-CASE-XLA-01989] c21 N70-34295

Slosh damping method for liquid rocket
propellant tanks
[NASA-CASE-XMF-00658] c12 N70-38997

Utilization of momentum devices for forming
attitude control and damping system for
spacecraft
[NASA-CASE-XLA-02551] c21 N71-21708

Three stage motion restraining mechanism for
restraining and damping three dimensional
vibrational movement of gimballed package
during launch of spacecraft
[NASA-CASE-GSC-10306-1] c15 N71-24694

Mutation damper for use on spinning body
[NASA-CASE-GSC-11205-1] c15 N73-25513

Development of electrical circuit for
suppressing oscillations across inductor
operating in resonant mode
[NASA-CASE-ERC-10403-1] c10 N73-26228

Apparatus for damping operator induced
oscillations of a controlled system --- using
adaptive filters to damp oscillations in a
flight control system

[NASA-CASE-FRC-11041-1] c33 N80-20488

DATA ACQUISITION

Conversion system for increasing resolution of analog to digital converters
[NASA-CASE-XAC-00404] c08 N70-40125

Development of telemetry system for position location and data acquisition
[NASA-CASE-GSC-10083-1] c30 N71-16090

Data acquisition system for converting displayed analog signal to digital values
[NASA-CASE-NPO-10344] c10 N71-26544

Data acquisition and processing system with buffer storage and timing device for magnetic tape recording of PCM data and timing information
[NASA-CASE-NPO-12107] c08 N71-27255

Simultaneous acquisition of tracking data from two stations
[NASA-CASE-NPO-13292-1] c32 N75-15654

Contour detector and data acquisition system for the left ventricular outline
[NASA-CASE-ABC-10985-1] c52 N79-10724

DATA COLLECTION PLATFORMS

Remote platform power conserving system
[NASA-CASE-GSC-11182-1] c15 N75-13007

DATA COMPRESSION

Minimum time delay unit for conventional time multiplexed data compression channels
[NASA-CASE-XNP-08832] c08 N71-12506

Data compression processor for monitoring analog signals by sampling procedure
[NASA-CASE-NPO-10068] c08 N71-19288

Wide range analog data compression system
[NASA-CASE-XGS-02612] c08 N71-19435

Apparatus with summing network for compression of analog data by decreasing slope threshold sampling
[NASA-CASE-NPO-10769] c08 N72-11171

Data reduction and transmission system for TV PCM data
[NASA-CASE-NPO-11243] c07 N72-20154

Gated compressor, distortionless signal limiter
[NASA-CASE-NPO-11820-1] c32 N74-19788

Space communication system for compressed data with a concatenated Reed-Solomon-Viterbi coding channel
[NASA-CASE-NPO-13545-1] c32 N77-12240

Sampling video compression system
[NASA-CASE-ABC-10984-1] c32 N77-24328

DATA CONVERTERS

Logarithmic converter for compressing 19-digit binary input number to 8-digit output
[NASA-CASE-XLA-00471] c08 N70-34778

Mechanical coordinate converter for use with spacecraft tracking antennas
[NASA-CASE-XNP-00614] c14 N70-36907

Analog signal to discrete time converter
[NASA-CASE-ERC-10048] c09 N72-25251

Digital converter for scaling binary number to binary coded decimal number of higher multiple
[NASA-CASE-KSC-10595] c08 N73-12176

Image data rate converter having a drum with a fixed head and a rotatable head
[NASA-CASE-NPO-11659-1] c35 N74-11283

Electronic analog divider
[NASA-CASE-LEW-11881-1] c33 N77-17354

Digital demodulator
[NASA-CASE-LAR-12659-1] c33 N80-31731

DATA CORRELATION

An instrument for determining coincidence and elapse time between independent sources of random sequential events
[NASA-CASE-LAR-12531-1] c35 N81-31529

DATA LINKS

Characteristics of two channel telemetry system with two data rate channels for high and low data rate communication
[NASA-CASE-NPO-11572] c07 N73-16121

Automatic accounting system for transfer of data from terminals to computer
[NASA-CASE-NPO-11456] c08 N73-26176

Multi-computer multiple data path hardware exchange system
[NASA-CASE-NPO-13422-1] c60 N76-14818

Apparatus for simulating optical transmission links
[NASA-CASE-GSC-11877-1] c74 N76-18913

DATA MANAGEMENT

Selective data segment monitoring system ---

using shift registers
[NASA-CASE-ARC-10899-1] c60 N77-19760

DATA PROCESSING

Data processing and display system for terminal guidance of X-15 aircraft
[NASA-CASE-XFB-00756] c02 N71-13421

Encoders designed to generate comma free biorthogonal Reed-Muller type code comprising conversion of 64 6-bit words into 64 32-bit data for communication purposes
[NASA-CASE-NPO-10595] c10 N71-25917

Data acquisition and processing system with buffer storage and timing device for magnetic tape recording of PCM data and timing information
[NASA-CASE-NPO-12107] c08 N71-27255

Digital data handling circuits for pulse amplifiers
[NASA-CASE-XNP-01068] c10 N71-28739

Synchronized digital communication system
[NASA-CASE-XNP-03623] c09 N73-28084

Image data rate converter having a drum with a fixed head and a rotatable head
[NASA-CASE-NPO-11659-1] c35 N74-11283

Charge-coupled device data processor for an airborne imaging radar system
[NASA-CASE-NPO-13587-1] c32 N77-32342

Interactive color display for multispectral imagery using correlation clustering
[NASA-CASE-NSC-16253-1] c32 N79-20297

High-speed multiplexing of keyboard data inputs
[NASA-CASE-NPO-14554-1] c60 N81-27814

DATA PROCESSING EQUIPMENT

Data processor having multiple sections activated at different times by selective power coupling to sections
[NASA-CASE-XGS-04767] c08 N71-12494

Development of demodulation system for removing amplitude modulation from two quadrature displaced data bearing signals
[NASA-CASE-XAC-04030] c10 N71-19472

Development and characteristics of rate augmented digital to analog converter for computed time-dependent data
[NASA-CASE-XLA-07828] c08 N71-27057

Data processor with plural register stages for selectively interconnecting with each other to effect multiplicity of operations
[NASA-CASE-GSC-10186] c08 N71-33110

Development and characteristics of telemetry system using computer-accessed circuits and remotely controlled from ground station
[NASA-CASE-NPO-11358] c07 N72-25172

Development and characteristics of data decoder to process convolution encoded information
[NASA-CASE-NPO-11371] c08 N73-12177

Characteristics of digital data processor using pulse from clock source to derive binary singles to show state of various indicators in processor
[NASA-CASE-GSC-10975-1] c08 N73-13187

Automatic accounting system for transfer of data from terminals to computer
[NASA-CASE-NPO-11456] c08 N73-26176

Space communication system for compressed data with a concatenated Reed-Solomon-Viterbi coding channel
[NASA-CASE-NPO-13545-1] c32 N77-12240

High-speed multiplexing of keyboard data inputs
[NASA-CASE-NPO-14554-1] c60 N81-27814

DATA RECORDERS

Description of system for recording and reading out data related to distribution of occurrence of plurality of events
[NASA-CASE-XNP-04067] c08 N71-22707

Design and characteristics of recording system for selective reprocessing and filtering of data to obtain optimum signal to noise ratios
[NASA-CASE-ERC-10112] c07 N72-21119

Recorder/processor apparatus --- for optical data processing
[NASA-CASE-GSC-11553-1] c35 N74-15831

DATA RECORDING

System for recording and reproducing PCM data from data stored on magnetic tape
[NASA-CASE-XGS-01021] c08 N71-21042

Description of system for recording and reading out data related to distribution of occurrence of plurality of events

[NASA-CASE-XNP-04067] c08 N71-22707
Development of data storage system for storing digital data in high density format on magnetic tape
[NASA-CASE-XNP-02778] c08 N71-22710
Transient video signal tape recorder with expanded playback
[NASA-CASE-ARC-10003-1] c09 N71-25866
Apparatus for on-film optical recording of camera lens aperture and focus setting
[NASA-CASE-MSC-12363-1] c14 N73-26431
Image data rate converter having a drum with a fixed head and a rotatable head
[NASA-CASE-NPO-11659-1] c35 N74-11283
Holography utilizing surface plasmon resonances
[NASA-CASE-MPS-22040-1] c35 N74-26946

DATA REDUCTION

System for storing histogram data in optimum number of elements
[NASA-CASE-XNP-05785] c08 N69-21928
Respiration analyzing method and apparatus for determining subjects oxygen consumption in aerospace environments
[NASA-CASE-XPR-08403] c05 N71-11202
Minimum time delay unit for conventional time multiplexed data compression channels
[NASA-CASE-XNP-08832] c08 N71-12506
Data compression processor for monitoring analog signals by sampling procedure
[NASA-CASE-NPO-10068] c08 N71-19288
Wide range analog data compression system
[NASA-CASE-XGS-02612] c08 N71-19435
Description of system for recording and reading out data related to distribution of occurrence of plurality of events
[NASA-CASE-XNP-04067] c08 N71-22707
Apparatus with summing network for compression of analog data by decreasing slope threshold sampling
[NASA-CASE-NPO-10769] c08 N72-11171
Data reduction and transmission system for TV PCM data
[NASA-CASE-NPO-11243] c07 N72-20154
Data compression using decreasing slope threshold test and digital techniques
[NASA-CASE-NPO-11630] c08 N72-33172

DATA RETRIEVAL

Magnetic matrix memory system for nondestructive reading of information contained in matrix
[NASA-CASE-XMF-05835] c08 N71-12504
Asynchronous, multiplexing, single line transmission and recovery data system --- for satellite use
[NASA-CASE-NPO-13321-1] c32 N75-26195

DATA SAMPLING

Monitoring circuit design for sampling circuit control and reduction of time-bandwidth in video communication systems
[NASA-CASE-XNP-02791] c07 N71-23026
Sampling circuit for signal processing in multiplex transmission by Fourier analysis
[NASA-CASE-NPO-10388] c07 N71-24622
Video signal processing system for sampling video brightness levels
[NASA-CASE-NPO-10140] c07 N71-24742
Apparatus with summing network for compression of analog data by decreasing slope threshold sampling
[NASA-CASE-NPO-10769] c08 N72-11171
Sampling video compression system
[NASA-CASE-ARC-10984-1] c32 N77-24328
CCD correlated quadruple sampling processor
[NASA-CASE-NPO-14426-1] c33 N81-27396

DATA SMOOTHING

Variable time constant, wide frequency range smoothing network for noise removal from pulse chains
[NASA-CASE-XGS-01983] c10 N70-41964
Smoothing filter for digital to analog conversion
[NASA-CASE-FRC-11025-1] c60 N80-17723

DATA STORAGE

Data handling based on source significance, storage availability, and data received from source
[NASA-CASE-XNP-04162-1] c08 N70-34675
Magnetic matrix memory system for nondestructive reading of information contained in matrix
[NASA-CASE-XMF-05835] c08 N71-12504

Tape guidance system for multichannel digital recording system
[NASA-CASE-XNP-09453] c08 N71-19420
Event recorder with constant speed motor which rotates recording disk
[NASA-CASE-XLA-01832] c14 N71-21006
System for recording and reproducing PCM data from data stored on magnetic tape
[NASA-CASE-XGS-01021] c08 N71-21042
Development of data storage system for storing digital data in high density format on magnetic tape
[NASA-CASE-XNP-02778] c08 N71-22710
Multiple pattern holographic information storage and readout system
[NASA-CASE-EEC-10151] c16 N71-29131
Momentum wheel design for spacecraft attitude control and magnetic drum and head system for data storage
[NASA-CASE-NFO-11481] c21 N73-13644
Data storage, image tube type
[NASA-CASE-MSC-14053-1] c60 N74-12888
Lightning current waveform measuring system
[NASA-CASE-KSC-11018-1] c33 N79-10337

DATA SYSTEMS

Data handling based on source significance, storage availability, and data received from source
[NASA-CASE-XNP-04162-1] c08 N70-34675
Development and characteristics of rate augmented digital to analog converter for computed time-dependent data
[NASA-CASE-XLA-07828] c08 N71-27057
Method and apparatus for decoding compatible convolutional codes
[NASA-CASE-MSC-14070-1] c32 N74-32598

DATA TRANSMISSION

Telemetry data unit to form multibit words for use between demodulator and computer
[NASA-CASE-XNP-09225] c09 N69-24333
Phase shift data transmission system with pseudo-noise synchronization code modulated with digital data into single channel for spacecraft communication
[NASA-CASE-XNP-00911] c08 N70-41961
Minimum time delay unit for conventional time multiplexed data compression channels
[NASA-CASE-XNP-08832] c08 N71-12506
Data compression processor for monitoring analog signals by sampling procedure
[NASA-CASE-NPO-10068] c08 N71-19288
Wide range analog data compression system
[NASA-CASE-XGS-02612] c08 N71-19435
Plural channel data transmission system with quadrature modulation and complementary demodulation
[NASA-CASE-XAC-06302] c08 N71-19763
Monitoring circuit design for sampling circuit control and reduction of time-bandwidth in video communication systems
[NASA-CASE-XNP-02791] c07 N71-23026
Frequency shift keying apparatus for use with pulse code modulation data transmission system
[NASA-CASE-XGS-01537] c07 N71-23405
Binary data decoding device for use at receiving end of communication channel
[NASA-CASE-NPO-10118] c07 N71-24741
Data reduction and transmission system for TV PCM data
[NASA-CASE-NFO-11243] c07 N72-20154
Characteristics of two channel telemetry system with two data rate channels for high and low data rate communication
[NASA-CASE-NFO-11572] c07 N73-16121
Automatic accounting system for transfer of data from terminals to computer
[NASA-CASE-NFO-11456] c08 N73-26176
System for generating timing and control signals
[NASA-CASE-NPO-13125-1] c33 N75-19519
Sampling video compression system
[NASA-CASE-ARC-10984-1] c32 N77-24328
Pseudo noise code and data transmission method and apparatus
[NASA-CASE-GSC-12017-1] c32 N77-30308
Multi-channel rotating optical interface for data transmission
[NASA-CASE-NPO-14066-1] c74 N79-34011
System for a displaying at a remote station data generated at a central station and for

- powering the remote station from the central station
[NASA-CASE-GSC-12411-1] c33 N81-14221
- DAWSONITE**
Synthesis of dawsonites
[NASA-CASE-ARC-113261-1] c25 N80-31490
- DEBRIS**
Counter pumping debris excluder and separator
--- gas turbine shaft seals
[NASA-CASE-LEW-11855-1] c07 N78-25690
- DECAY RATES**
Solar sensor with coarse and fine sensing elements for matching preirradiated cells on degradation rates
[NASA-CASE-XLA-01584] c14 N71-23269
- DECELERATION**
Assembly for opening flight capsule stabilizing and decelerating flaps with reference to capsule recovery
[NASA-CASE-XMP-00641] c31 N70-36410
Device for use in descending spacecraft as altitude sensor for actuating deceleration retrorockets
[NASA-CASE-XMS-03792] c14 N70-41812
Development and characteristics of hot air balloon deceleration and recovery system
[NASA-CASE-XLA-06824-2] c02 N71-11037
Zero gravity apparatus utilizing pneumatic decelerating means to create payload subjected to zero gravity conditions by dropping its height
[NASA-CASE-XMP-06515] c14 N71-23227
- DECIMALS**
Digital converter for scaling binary number to binary coded decimal number of higher multiple
[NASA-CASE-KSC-10595] c08 N73-12176
- DECISION MAKING**
Method and apparatus for decoding compatible convolutional codes.
[NASA-CASE-MSC-14070-1] c32 N74-32598
- DECODERS**
Serial digital decoder design with square circuit matrix and serial memory storage units
[NASA-CASE-NPO-10150] c08 N71-24650
Binary to decimal decoder logic circuit design with feedback control and display device
[NASA-CASE-XKS-06167] c08 N71-24890
Design and development of encoder/decoder system to generate binary code which is function of outputs of plurality of bistable elements
[NASA-CASE-NPO-10342] c10 N71-33407
Compact-bi-phase pulse code modulation decoder
[NASA-CASE-KSC-10834-1] c33 N76-14371
Low distortion receiver for bi-level baseband PCM waveforms
[NASA-CASE-MSC-14557-1] c32 N76-16249
Three phase full wave dc motor decoder
[NASA-CASE-GSC-11824-1] c33 N77-26386
Serial data correlator/code translator
[NASA-CASE-KSC-11025-1] c32 N79-28383
Decommutator patchboard verifier
[NASA-CASE-KSC-11065-1] c33 N81-26359
- DECODING**
Binary data decoding device for use at receiving end of communication channel
[NASA-CASE-NPO-10118] c07 N71-24741
Development and characteristics of data decoder to process convolution encoded information
[NASA-CASE-NPO-11371] c08 N73-12177
Method and apparatus for decoding compatible convolutional codes
[NASA-CASE-MSC-14070-1] c32 N74-32598
Differential pulse code modulation
[NASA-CASE-MSC-12506-1] c32 N77-12239
- DECOMMUTATORS**
Memory-based parallel data output controller
[NASA-CASE-GSC-12447-1] c60 N80-21587
Decommutator patchboard verifier
[NASA-CASE-KSC-11065-1] c33 N81-26359
- DECONTAMINATION**
Decontamination of petroleum products with honey
[NASA-CASE-XMP-03835] c06 N71-23499
Heat exchanger and decontamination system for multistage refrigeration unit
[NASA-CASE-NPO-10634] c23 N72-25619
Plasma cleaning device --- designed for high vacuum environments
[NASA-CASE-MFS-22906-1] c75 N78-27913
- DEEP SPACE NETWORK**
Low phase noise frequency divider for use with deep space network communication system
[NASA-CASE-NPO-11569] c10 N73-26229
- DEFECTS**
Hybrid holographic non-destructive test system
[NASA-CASE-MFS-23114-1] c38 N78-32447
- DEFLECTION**
Bipropellant injector with pair of concave deflector plates
[NASA-CASE-XNP-09461] c28 N72-23809
Noncontacting method for measuring angular deflection
[NASA-CASE-LAR-12178-1] c74 N80-21138
- DEFLECTORS**
Deflector for preventing objects from entering nacelle inlets of jet aircraft
[NASA-CASE-XLE-00388] c28 N70-34788
Aircraft wheel spray drag alleviator for dual tandem landing gear
[NASA-CASE-XLA-01583] c02 N70-36825
Ion beam deflector system for electronic thrust vector control for ion propulsion yaw, pitch, and roll forces
[NASA-CASE-LEW-10689-1] c28 N71-26173
Exhaust flow deflector --- for ducted gas flow
[NASA-CASE-LAR-11570-1] c34 N76-18364
Safety shield for vacuum/pressure chamber viewing port
[NASA-CASE-GSC-12513-1] c31 N81-19343
- DEFOCUSING**
Optical retrodirective modulator with focus spoiling reflector driven by modulation signal
[NASA-CASE-GSC-10062] c14 N71-15605
- DEFORMATION**
Deformation measuring apparatus with feedback control for arbitrarily shaped structures
[NASA-CASE-LAR-10098] c32 N71-26681
Development of device for simulating cyclic thermal loading of flexible materials by application of mechanical stresses and deformations
[NASA-CASE-LAR-10270-1] c32 N72-25877
Deformable bearing seat
[NASA-CASE-LEW-12527-1] c37 N77-32500
- DEGREES OF FREEDOM**
Attitude control training device for astronauts permitting friction-free movement with five degrees of freedom
[NASA-CASE-XMS-02977] c11 N71-10746
Tuned damped vibration absorber for mass vibrating in more than one degree of freedom for use with wind tunnel models
[NASA-CASE-LAR-10083-1] c15 N71-27006
Kinesthetic control simulator --- for pilot training
[NASA-CASE-LAR-10276-1] c09 N75-15662
- DEHUMIDIFICATION**
Condenser-separator for dehumidifying air utilizing sintered metal surface
[NASA-CASE-XLA-08645] c15 N69-21465
- DEHYDRATED FOOD**
Rice preparation process consisting of cooking, two freezing-thawing cycles, and then freeze drying
[NASA-CASE-MSC-13540-1] c05 N72-33096
- DELAY CIRCUITS**
Development of pulsed differential comparator circuit
[NASA-CASE-XLE-03804] c10 N71-19471
Pulse duration control device for driving slow response time loads in selected sequence including switching and delay circuits and magnetic storage
[NASA-CASE-XGS-04224] c10 N71-26418
Telemetry synchronizer
[NASA-CASE-GSC-11868-1] c17 N76-22245
Swept group delay measurement
[NASA-CASE-NPO-13909-1] c33 N78-25319
Pseudonoise code tracking loop
[NASA-CASE-MSC-18035-1] c32 N81-15179
Combinational logic for generating gate drive signals for phase control rectifiers
[NASA-CASE-MFS-25208-1] c33 N81-27402
- DELAY LINES**
Development and characteristics of solid state acoustic variable time delay line using direct current voltage and radio frequency pulses
[NASA-CASE-ERC-10032] c10 N71-25900

DELTA MODULATION

Multifunction audio digitizer --- producing direct delta and pulse code modulation
[NASA-CASE-MSC-13855-1] c35 N74-17885

DELTA WINGS

Delta winged, manned reentry vehicle capable of horizontal glide landing at low speeds
[NASA-CASE-XLA-00241] c31 N70-37586

DEMAGNETIZATION

Tumbling motion system for object demagnetization
[NASA-CASE-IGS-02437] c15 N69-21472

DEMODULATION

Plural channel data transmission system with quadrature modulation and complementary demodulation
[NASA-CASE-XAC-06302] c08 N71-19763
Restoration and improvement of demodulated facsimile video signals
[NASA-CASE-GSC-10185-1] c07 N72-12081
Quadrature demodulation
[NASA-CASE-GSC-12137-1] c33 N78-32338

DEMODULATORS

Telemetry data unit to form multibit words for use between demodulator and computer
[NASA-CASE-XNP-09225] c09 N69-24333
Frequency shift keyed demodulator - circuit diagrams
[NASA-CASE-XGS-02889] c07 N71-11282
Demodulator for simultaneous demodulation of two modulating ac signal carriers close in frequency
[NASA-CASE-XMF-01160] c07 N71-11298
Development of demodulation system for removing amplitude modulation from two quadrature displaced data bearing signals
[NASA-CASE-XAC-04030] c10 N71-19472
Calibrator for measuring and modulating or demodulating laser outputs
[NASA-CASE-XLA-03410] c16 N71-25914
Threshold extension device for improving operating performance of frequency modulation demodulators by eliminating click-type noise impulses
[NASA-CASE-MSC-12165-1] c07 N71-33696
Full wave modulator-demodulator amplifier apparatus --- for generating rectified output signal
[NASA-CASE-PRC-10072-1] c33 N74-14939
Unbalanced quadrature demodulator
[NASA-CASE-MSC-14840-1] c32 N77-24331
Digital demodulator-correlator
[NASA-CASE-NPO-13982-1] c32 N79-14267
Digital demodulator
[NASA-CASE-LAR-12659-1] c33 N80-31731
Self-calibrating threshold detector
[NASA-CASE-MSC-16370-1] c35 N81-19427

DENSIFICATION

Densification of porous refractory substrates --- space shuttle orbiter tiles
[NASA-CASE-MSC-18737-1] c25 N81-29180

DENSITOMETERS

Capacitor for measuring density of compressible fluid in liquid, gas, or liquid and gas phases
[NASA-CASE-XLE-00143] c14 N70-36618
Measuring density of single and two-phase cryogenic fluids in rocket fuel tanks
[NASA-CASE-XLE-00688] c14 N70-41330
Ultrasonic bone densitometer
[NASA-CASE-MFS-20994-1] c35 N75-12271

DENSITY (MASS/VOLUME)

A stable density-stratification scalar pond
[NASA-CASE-NFO-15419-1] c44 N81-27599

DENSITY DISTRIBUTION

Increasing available power per unit area in ion rocket engine by increasing beam density
[NASA-CASE-XLE-00519] c28 N70-41576
Method and apparatus for compensating reflection losses in a path length modulated absorption-absorption trace gas detector --- for determining density of gas
[NASA-CASE-ABC-10631-1] c74 N76-20958

DENSITY MEASUREMENT

Capacitor for measuring density of compressible fluid in liquid, gas, or liquid and gas phases
[NASA-CASE-XLE-00143] c14 N70-36618
Measuring density of single and two-phase cryogenic fluids in rocket fuel tanks
[NASA-CASE-XLE-00688] c14 N70-41330
Determining particle density using known material Hugoniot curves

[NASA-CASE-LAR-11059-1] c76 N75-12810
Selective image area control of X-ray film exposure density
[NASA-CASE-NFO-13808-1] c35 N78-15461

DENTISTRY

Process for preparing calcium phosphate salts for tooth repair
[NASA-CASE-EBC-10338] c04 N72-33072
Acoustic tooth cleaner
[NASA-CASE-LAR-12471-1] c52 N81-12724

DEOXYGENATION

Electrocatalyst for oxygen reduction in low temperature alkaline fuel cell
[NASA-CASE-HQN-10537-1] c06 N72-10138

DEPLOYMENT

Extendable, self-deploying boom apparatus
[NASA-CASE-GSC-10566-1] c15 N72-18477
Deployable cantilever support for deploying solar cell arrays aboard spacecraft and reducing transient loading
[NASA-CASE-NFO-10883] c31 N72-22874
High acceleration cable deployment system
[NASA-CASE-ABC-11256-1] c37 N79-23432
Antenna deployment mechanism for use with a spacecraft --- extensible and retractable telescopic antenna mast
[NASA-CASE-GSC-12331-1] c18 N80-14183

DEPOSITION

Means and methods of depositing thin films on substrates
[NASA-CASE-XNP-00595] c15 N70-34967
Dual wavelength system for monitoring film deposition
[NASA-CASE-MFS-20675] c26 N73-26751
Production of pure metals
[NASA-CASE-LRW-10906-1] c25 N74-30502

DESCENT

Emergency descent device
[NASA-CASE-MFS-23074-1] c54 N77-21844

DESIGN ANALYSIS

Airfoil shape for flight at subsonic speeds --- design analysis and aerodynamic characteristics of the GAW-1 airfoil
[NASA-CASE-LAR-10585-1] c02 N76-22154
Snap-in compressible biomedical electrode
[NASA-CASE-MSC-14623-1] c52 N77-28717

DESTABILIZATION

Aircraft body-axis rotation measurement system
[NASA-CASE-PRC-11043-1] c06 N81-22048

DESTRUCTIVE TESTS

Aeroelastic instability stoppers for wind-tunnel models
[NASA-CASE-LAR-12458-1] c09 N81-31230

DESULFURIZING

Coal desulfurization process
[NASA-CASE-NPO-13937-1] c44 N78-31527
Continuous coal processing method
[NASA-CASE-NFO-13758-2] c31 N81-15154
Coal desulfurization --- using iron pentacarbonyl
[NASA-CASE-NFO-14272-1] c25 N81-33246

DETECTION

Heated element sensor for fluid flow detection in thermal conductive conduit with adaptive means to determine flow rate and direction
[NASA-CASE-MSC-12084-1] c12 N71-17569
Fluid leakage detection system with automatic monitoring capability
[NASA-CASE-LAR-10323-1] c12 N71-17573
Metal detection system with electromagnetic transmitter with single coil and receiver with single coil
[NASA-CASE-ABC-10265-1] c10 N72-28240
System for detecting impact position of cosmic dust on detector surface
[NASA-CASE-GSC-11291-1] c25 N72-33696
Detection of bacteria in biological fluids and foods
[NASA-CASE-GSC-11533-1] c14 N73-13435
Short range laser obstacle detector --- for surface vehicles using laser diode array
[NASA-CASE-NFO-11856-1] c36 N74-15145
Vacuum leak detector
[NASA-CASE-LAR-11237-1] c35 N75-19612
Method and device for destructive detection of a substance --- useful in determining the concentration of carbon fibers or pollutant particles
[NASA-CASE-NPO-14940-1] c35 N80-21723

- Photoelectric detection system
[NASA-CASE-MFS-23776-1] c74 N80-25134
- Apparatus and process for microbial detection and enumeration
[NASA-CASE-LAR-12709-1] c51 N81-29727
- DETECTORS**
- Pressurized cell micrometeoroid detector
[NASA-CASE-XLA-00936] c14 N71-14996
- Development of large area micrometeoroid impact detector panels
[NASA-CASE-XLA-05906] c31 N71-16221
- Development of pulse-activated polarographic hydrogen detector
[NASA-CASE-XMP-06531] c14 N71-17575
- Electro-optical detector for determining position of light source
[NASA-CASE-XNP-01059] c23 N71-21821
- Method for locating leaks in hermetically sealed containers
[NASA-CASE-ERC-10045] c15 N71-24910
- Precipitation detector and mechanism for stopping and restarting machinery at initiation and cessation of rain
[NASA-CASE-XLA-02619] c10 N71-26334
- Hydrogen fire blink detector for high altitude rocket or ground installation
[NASA-CASE-MFS-15063] c14 N72-25412
- Device for detection of combustion light preceding gaseous explosions
[NASA-CASE-LAR-10739-1] c14 N73-16484
- Optical imaging system for increasing light absorption efficiency of imaging detector
[NASA-CASE-ARC-10194-1] c23 N73-20741
- Cold cathode discharge tube with pressurized gas cell for meteoroid detection in space
[NASA-CASE-LAR-10483-1] c14 N73-32327
- Deployable pressurized cell structure for a micrometeoroid detector
[NASA-CASE-LAR-10295-1] c35 N74-21062
- Modulated hydrogen ion flame detector
[NASA-CASE-ARC-10322-1] c35 N76-18403
- Coal-rock interface detector
[NASA-CASE-MFS-23725-1] c43 N79-31706
- DETERGENTS**
- Anti-fog composition --- for prevention of fogging on surfaces such as space helmet visors and windshields
[NASA-CASE-MSC-13530-2] c23 N75-14834
- DETONATION**
- Optically detonated explosive device
[NASA-CASE-NPO-11743-1] c28 N74-27425
- DETONATION WAVES**
- Detonation reaction engine comprising outer housing enclosing pair of inner walls for continuous flow
[NASA-CASE-XMP-06926] c28 N71-22583
- DEUTERIUM**
- Gas chromatographic method for analyzing hydrogen deuterium mixtures
[NASA-CASE-NPO-11322] c06 N72-25146
- Deuterium pass through target --- neutron emitting target
[NASA-CASE-LEW-11866-1] c72 N76-15860
- DIAGNOSIS**
- Coupling apparatus for ultrasonic medical diagnostic system
[NASA-CASE-NPO-13935-1] c52 N79-14751
- Medical diagnosis system and method with multispectral imaging --- depth of burns and optical density of the skin
[NASA-CASE-NPO-14402-1] c52 N81-27783
- DIAGRAMS**
- Phototransistor with base collector junction diode for integration into photo sensor arrays
[NASA-CASE-MFS-20407] c09 N73-19235
- DIALYSIS**
- Dialysis system --- using ion exchange resin membranes permeable to urea molecules
[NASA-CASE-NPO-14101-1] c52 N80-14667
- DIAMINES**
- Preparation of elastomeric diamine silazane polymers
[NASA-CASE-XMP-04133] c06 N71-20717
- Synthesis of aromatic diamines and dialdehyde polymers using Schiff base
[NASA-CASE-XMP-03074] c66 N71-24740
- Synthesis of siloxane containing epoxide and diamine polymers
[NASA-CASE-MFS-13994-2] c66 N72-25148
- Stable polyimide synthesis from mixtures of monomeric diamines and polycarboxylic acid esters
[NASA-CASE-LEW-11325-1] c06 N73-27980
- Mixed diamines for lower melting addition polyimide preparation and utilization
[NASA-CASE-LAR-12054-1] c27 N79-33316
- Method for preparing addition type polyimide prepreqs
[NASA-CASE-LAR-12054-2] c27 N81-14078
- DIAMONDS**
- Exponential horn, copper plate, magnetic hammer, and anvil in apparatus for making diamonds
[NASA-CASE-MFS-20698] c15 N72-20446
- Simplified technique and device for producing industrial grade synthetic diamonds
[NASA-CASE-MFS-20698-2] c15 N73-19457
- DIAPHRAGMS (MECHANICS)**
- Expulsion and measuring device for determining quantity of liquid in tank under conditions of weightlessness
[NASA-CASE-XMS-01546] c14 N70-40233
- Reinforcing beam system for highly flexible diaphragms in valves or pressure switches
[NASA-CASE-XNP-01962] c32 N70-41370
- Flexible rocket motor nozzle closure device to aid ignition and protect rocket chamber from foreign objects
[NASA-CASE-XLA-02651] c28 N70-41967
- Knife structure for controlling rupture of shock tube diaphragms
[NASA-CASE-XAC-00731] c11 N71-15960
- Magnetically opened diaphragm design with camera shutter and expansion tube applications
[NASA-CASE-XLA-03660] c15 N71-21060
- Design and development of inertia diaphragm pressure transducer
[NASA-CASE-XAC-02981] c14 N71-21072
- Punch and die device for forming convolution series in thin gage metal hemispheres
[NASA-CASE-XNP-05297] c15 N71-23811
- Development of differential pressure control system using motion of mechanical diaphragms to operate electric switch
[NASA-CASE-MFS-14216] c14 N73-13418
- DIATOMIC GASES**
- Diatomic infrared gasdynamic laser --- for producing different wavelengths
[NASA-CASE-ARC-10370-1] c36 N75-31426
- DICHROISM**
- Dichroic plate --- as bandpass filters
[NASA-CASE-NPO-13506-1] c35 N76-15435
- Microwave dichroic plate
[NASA-CASE-GSC-12171-1] c33 N79-28416
- DICKE RADIOMETERS**
- Distributed-switch Dicke radiometers
[NASA-CASE-GSC-12219-1] c35 N80-18359
- DIELECTRIC POLARIZATION**
- Charge injection method and apparatus of producing large area electrets
[NASA-CASE-MFS-23186-2] c24 N78-25137
- DIELECTRIC PROPERTIES**
- Capacitive tank gaging device for monitoring one constituent of two phase fluid by sensing dielectric constant
[NASA-CASE-MFS-21629] c14 N72-22442
- Fine particulate capture device
[NASA-CASE-LEW-11583-1] c35 N79-17192
- DIELECTRICS**
- Fabricating solar cells with dielectric layers to improve glass fusion
[NASA-CASE-XGS-04531] c03 N69-24267
- Temperature sensitive capacitor device for detecting very low intensity infrared radiation
[NASA-CASE-XNP-09750] c14 N69-39937
- Electrical power system for space flight vehicles operating over extended periods
[NASA-CASE-XMP-00517] c03 N70-34157
- Nose cone mounted heat resistant antenna comprising plurality of adjacent layers of silica not introducing paths of high thermal conductivity through ablative shield
[NASA-CASE-XMS-04312] c07 N71-22984
- Broadband microwave waveguide window to compensate dielectric material filling
[NASA-CASE-XNP-08880] c09 N71-24808
- Laser machining device with dielectric functioning as beam waveguide for mechanical and medical applications

- [NASA-CASE-HQN-10541-2] c15 N71-27135
Quasi-optical microwave circuit with dielectric body for use with oversize waveguides
[NASA-CASE-ERC-10011] c07 N71-29065
Semiconductor device manufacture using refractory dielectrics as diffusant masks and interconnection insulating materials
[NASA-CASE-XER-08476-1] c26 N72-17820
Material compositions and processes for developing dielectric thick films used in microcircuit capacitors
[NASA-CASE-LAR-10294-1] c26 N72-28762
Low loss dichroic plate
[NASA-CASE-NPO-13171-1] c32 N74-11000
Electrostatic measurement system --- for contact-electrifying a dielectric
[NASA-CASE-MFS-22129-1] c33 N75-18477
Method and apparatus for measurement of trap density and energy distribution in dielectric films
[NASA-CASE-NPO-13443-1] c76 N76-20994
Charge injection method and apparatus of producing large area electrets
[NASA-CASE-MFS-23186-1] c33 N76-23483
Preparation of dielectric coating of variable dielectric constant by plasma polymerization
[NASA-CASE-ARC-10892-2] c27 N79-14214
Dielectric-loaded waveguide circulator for cryogenically cooled and cascaded maser waveguide structures
[NASA-CASE-NPO-14254-1] c36 N80-18372
Microwave switching power divider --- for use in Earth orbiting satellites having spherical multi-element antenna arrays
[NASA-CASE-GSC-12420-1] c33 N80-21670
- DIES**
Punch and die device for forming convolution series in thin gage metal hemispheres
[NASA-CASE-XNP-05297] c15 N71-23611
Development and characteristics of frusto-conical die nib for extrusion of refractory metals
[NASA-CASE-XLE-06773] c15 N71-23617
Holding fixture for a hot stamping press
[NASA-CASE-GSC-12619-1] c37 N81-16470
- DIESEL ENGINES**
Diesel engine catalytic combustor system --- turbocharging
[NASA-CASE-LEW-12995-1] c37 N80-26659
- DIETS**
Reduction of blood serum cholesterol
[NASA-CASE-NPO-12119-1] c52 N75-15270
- DIFFERENTIAL AMPLIFIERS**
Temperature compensated solid state differential amplifier with application in bioinstrumentation circuits
[NASA-CASE-XAC-00435] c09 N70-35440
Stepping motor control apparatus exciting windings in proper time sequence to cause motor to rotate in either direction
[NASA-CASE-GSC-10366-1] c10 N71-18772
Multi-channel temperature measurement amplification system
[NASA-CASE-MFS-23775-1] c35 N80-17421
- DIFFERENTIAL INTERFEROMETRY**
Device for determining acceleration of gravity by interferometric measurement of travel of falling body
[NASA-CASE-XNP-05844] c14 N71-17587
- DIFFERENTIAL PRESSURE**
Relief valve to permit slow and fast bleeding rates at difference pressure levels
[NASA-CASE-XMS-05894-1] c15 N69-21924
Apparatus for ejecting covers of instrument packages using differential pressure principle
[NASA-CASE-XNP-04132] c15 N69-27502
Differential sound level meter
[NASA-CASE-LAR-12106-1] c71 N78-14667
Differential optoacoustic absorption detector
[NASA-CASE-NPO-13759-1] c74 N78-17867
System for use in conducting wake investigation for a wing in flight --- differential pressure measurements for drag investigations
[NASA-CASE-PRC-11024-1] c02 N80-28300
- DIFFERENTIATORS**
Window comparator
[NASA-CASE-PRC-10090-1] c33 N78-18308
- DIFFRACTION**
Highly stable optical mirror assembly optimizing image quality of light diffraction patterns
[NASA-CASE-ERC-10001] c23 N71-24868
- DIFFRACTION PATTERNS**
Digital sensor for counting fringes produced by interferometers with improved sensitivity and one photomultiplier tube to eliminate alignment problem
[NASA-CASE-LAR-10204] c14 N71-27215
- DIFFRACTOMETERS**
Dual purpose optical instrument capable of simultaneously acting as spectrometer and diffractometer
[NASA-CASE-XNP-05231] c14 N73-28491
- DIFFUSE RADIATION**
Transmitting and reflecting diffuser --- using ultraviolet grade fused silica coatings
[NASA-CASE-LAR-10385-3] c74 N78-15879
- DIFFUSERS**
Application of semiconductor diffusants to solar cells by screen printing
[NASA-CASE-LEW-12775-1] c44 N79-11468
- DIFFUSION**
Selective gold diffusion on monolithic silicon chips for switching and nonswitching amplifier devices and circuits and linear and digital logic circuits
[NASA-CASE-ERC-10072] c09 N70-11148
Metallic film diffusion for boundary lubrication in aerospace engineering
[NASA-CASE-XLE-10337] c15 N71-24046
Transmitting and reflecting diffuser --- for ultraviolet light
[NASA-CASE-LAR-10385-2] c70 N74-13436
- DIFFUSION PUMPS**
Oil trap for preventing diffusion pump backstreaming into evacuated system
[NASA-CASE-GSC-10518-1] c15 N72-22489
Programmable physiological infusion
[NASA-CASE-ARC-10447-1] c52 N74-22771
- DIFFUSION WELDING**
Method for diffusion welding dissimilar metals in vacuum chamber
[NASA-CASE-GSC-10303] c15 N72-22487
Reinforced FEP Teflon composite material diffusion bonded to metal substrate
[NASA-CASE-MFS-20482] c15 N72-22492
Two-step diffusion welding process of unrecrystallized alloys
[NASA-CASE-LEW-11388-1] c15 N73-32358
Method of fluxless brazing and diffusion bonding of aluminum containing components
[NASA-CASE-MSC-14435-1] c37 N76-18455
- DIGITAL COMMAND SYSTEMS**
Digitally controlled frequency synthesizer for pulse frequency modulation telemetry systems
[NASA-CASE-XGS-02317] c09 N71-23525
System for maintaining motor at predetermined speed using digital pulses
[NASA-CASE-XNP-06892] c09 N71-24805
Digital filter for reducing jitter in digital control systems
[NASA-CASE-NPO-11088] c08 N71-29034
- DIGITAL COMPUTERS**
Device for removing plastic dust cover from digital computer disk packs for inspection and cleaning
[NASA-CASE-LAR-10590-1] c15 N70-26819
Binary number sorter for arranging numbers in order of magnitude
[NASA-CASE-NPO-10112] c08 N71-12502
Binary sequence detector with few memory elements and minimized logic circuit complexity
[NASA-CASE-XNP-05415] c08 N71-12505
Digital computer system for automatic prelaunch checkout of spacecraft
[NASA-CASE-XKS-08012-2] c31 N71-15566
Description of error correcting methods for use with digital data computers and apparatus for encoding and decoding digital data
[NASA-CASE-XNP-02748] c08 N71-22749
Serial digital decoder design with square circuit matrix and serial memory storage units
[NASA-CASE-NPO-10150] c08 N71-24650
Digital magnetic core memory with sensing amplifier circuits
[NASA-CASE-XNP-01012] c08 N71-28925
Redundant memory for enhanced reliability of digital data processing system
[NASA-CASE-GSC-10564] c10 N71-29135

- Digital converter for scaling binary number to binary coded decimal number of higher multiple
[NASA-CASE-KSC-10595] c08 N73-12176
- Fault tolerant clock apparatus utilizing a controlled minority of clock elements
[NASA-CASE-MSC-12531-1] c35 N75-30504
- Two-dimensional radiant energy array computers and computing devices
[NASA-CASE-GSC-11839-1] c60 N77-14751
- Memory device for two-dimensional radiant energy array computers
[NASA-CASE-GSC-11839-2] c60 N78-10709
- DIGITAL DATA**
- Phase shift data transmission system with pseudo-noise synchronization code modulated with digital data into single channel for spacecraft communication
[NASA-CASE-INP-00911] c08 N70-41961
- Tape guidance system for multichannel digital recording system
[NASA-CASE-INP-09453] c08 N71-19420
- Digital telemetry system apparatus to reduce tape recorder wow and flutter noise during playback
[NASA-CASE-XGS-01812] c07 N71-23001
- Digital data handling circuits for pulse amplifiers
[NASA-CASE-INP-01068] c10 N71-28739
- Bit synchronization system using digital data transition tracking phased locked loop
[NASA-CASE-NPO-10844] c07 N72-20140
- Control and information system for digital telemetry data using analog converter to digitize sensed parameter values
[NASA-CASE-NPO-11016] c08 N72-31226
- Digital plus analog output encoder
[NASA-CASE-GSC-12115-1] c62 N76-31946
- Digital data reformatter/deserializer
[NASA-CASE-NPO-13676-1] c60 N79-20751
- DIGITAL FILTERS**
- Design and development of signal detection and tracking apparatus
[NASA-CASE-XGS-03502] c10 N71-20852
- Digital filter for reducing jitter in digital control systems
[NASA-CASE-NPO-11088] c08 N71-29034
- Nonrecursive counting digital filter containing shift register
[NASA-CASE-NPO-11821-1] c08 N73-26175
- Filtering device --- removing electromagnetic noise from voice communication signals
[NASA-CASE-NFS-22729-1] c32 N76-21366
- DIGITAL INTEGRATORS**
- Digital automatic gain amplifier
[NASA-CASE-KSC-11008-1] c33 N79-22373
- DIGITAL SPACECRAFT TELEVISION**
- TV camera output signal control system for digital spacecraft communication
[NASA-CASE-INP-01472] c14 N70-41607
- DIGITAL SYSTEMS**
- Light sensitive digital aspect sensor for attitude control of earth satellites or space probes
[NASA-CASE-XGS-00359] c14 N70-34158
- Circuit diagram and operation of full binary adder
[NASA-CASE-XGS-00689] c08 N70-34787
- Digital telemetry system apparatus to reduce tape recorder wow and flutter noise during playback
[NASA-CASE-XGS-01812] c07 N71-23001
- Reliable magnetic core circuit apparatus with application in selection matrices for digital memories
[NASA-CASE-INP-01318] c10 N71-23033
- Noninterruptable digital counter circuit design with display device for pulse frequency modulation
[NASA-CASE-INP-09759] c08 N71-24891
- Digital memory system with multiple switch cores for driving each word location
[NASA-CASE-INP-01466] c10 N71-26434
- Digital quasi-exponential function generator
[NASA-CASE-NPO-11130] c08 N72-20176
- Digital function generator for generating any arbitrary single valued function
[NASA-CASE-NPO-11104] c08 N72-22165
- Digital video system for displaying image and alphanumeric data on cathode ray tube
[NASA-CASE-NPO-11342] c09 N72-25248
- Data compression using decreasing slope threshold test and digital techniques
[NASA-CASE-NPO-11630] c08 N72-33172
- Characteristics of digital data processor using pulse from clock source to derive binary singles to show state of various indicators in processor
[NASA-CASE-GSC-10975-1] c08 N73-13187
- Low phase noise frequency divider for use with deep space network communication system
[NASA-CASE-NPO-11569] c10 N73-26229
- Synchronized digital communication system
[NASA-CASE-INP-03623] c09 N73-28084
- Digital second-order phase-locked loop
[NASA-CASE-NPO-11905-1] c33 N74-12887
- Digital controller for a Baum folding machine --- providing automatic counting and machine shutoff
[NASA-CASE-LAR-10688-1] c37 N74-21056
- Digital transmitter for data bus communications system
[NASA-CASE-MSC-14558-1] c32 N75-21486
- Automatic character skew and spacing checking network --- of digital tape drive systems
[NASA-CASE-GSC-11925-1] c33 N76-18353
- Anti-multipath digital signal detector
[NASA-CASE-LAR-11827-1] c32 N77-10392
- Multiple rate digital command detection system with range clean-up capability
[NASA-CASE-NPO-13753-1] c32 N77-20289
- Open loop digital frequency multiplier
[NASA-CASE-MSC-12709-1] c33 N77-24375
- Bit error rate measurement above and below bit rate tracking threshold
[NASA-CASE-MSC-12743-1] c32 N79-10263
- Apparatus and method for stabilized phase detection for binary signal tracking loops
[NASA-CASE-MSC-16461-1] c33 N79-11313
- Digital demodulator-correlator
[NASA-CASE-NPO-13982-1] c32 N79-14267
- Memory-based frame synchronizer --- for voice data processing in digital communication systems
[NASA-CASE-GSC-12430-1] c32 N80-20453
- DIGITAL TECHNIQUES**
- Describing frequency discriminator using digital logic circuits and supplying single binary output signal
[NASA-CASE-NFS-14322] c08 N71-18692
- Constructing Exclusive-Or digital logic circuit in single module
[NASA-CASE-ILA-07732] c08 N71-18751
- Horizon sensor design with digital sampling of spaced radiation-compensated thermopile infrared detectors
[NASA-CASE-INP-06957] c14 N71-21088
- Digital cardiometer incorporating circuit for measuring heartbeat rate of subject over predetermined portion of one minute also converting rate to beats per minute
[NASA-CASE-XNS-02399] c05 N71-22896
- Digital synchronizer for extracting binary data in receiver of PSK/PCM communication system
[NASA-CASE-NPO-10851] c07 N71-24613
- Digital sensor for counting fringes produced by interferometers with improved sensitivity and one photomultiplier tube to eliminate alignment problem
[NASA-CASE-LAR-10204] c14 N71-27215
- Apparatus and digital technique for coding rate data
[NASA-CASE-LAR-10128-1] c08 N73-20217
- Digital communication system
[NASA-CASE-MSC-13912-1] c32 N74-30524
- Digital phase-locked loop
[NASA-CASE-GSC-11623-1] c33 N75-25040
- Digital numerically controlled oscillator
[NASA-CASE-MSC-16747-1] c33 N81-17349
- DIGITAL TO ANALOG CONVERTERS**
- Development and characteristics of rate augmented digital to analog converter for computed time-dependent data
[NASA-CASE-ILA-07828] c08 N71-27057
- Digital to analog converter with parallel input/output memory device
[NASA-CASE-KSC-10397] c08 N72-25206
- Digital to analog converter for sampled signal reconstruction
[NASA-CASE-MSC-12458-1] c08 N73-32081

- High speed, glitch-free digital to analog converter
[NASA-CASE-GSC-12319-1] c60 N79-32852
Smoothing filter for digital to analog conversion
[NASA-CASE-FRC-11025-1] c60 N80-17723
- DIGITAL TRANSDUCERS**
Digital to analog converter for sampled signal reconstruction
[NASA-CASE-MSC-12458-1] c08 N73-32081
Angle detector
[NASA-CASE-ARC-11036-1] c35 N78-32395
- DIISOCYANATES**
Chemical and physical properties of synthetic polyurethane polymer prepared by reacting hydroxy carbonate with organic diisocyanate
[NASA-CASE-MFS-10512] c06 N73-30099
Preparation of stable polyurethane polymer by reacting polymer with diisocyanate
[NASA-CASE-MFS-10506] c06 N73-30100
Preparation of polyurethane polymer by reacting hydroxy polyformal with organic diisocyanate
[NASA-CASE-MFS-10509] c06 N73-30103
- DIMENSIONS**
Projection system for display of parallax and perspective
[NASA-CASE-MFS-23194-1] c35 N78-17357
- DIODES**
Single electrical circuit component combining diode, fuse, and blown indicator with elongated tube of heat resistant transparent material
[NASA-CASE-XKS-03381] c09 N71-22796
Maintaining current flow through solar cells with open connection using shunting diode
[NASA-CASE-XLE-04535] c03 N71-23354
Gunn effect microwave diodes with RF shielding
[NASA-CASE-ERC-10119] c26 N72-21701
Transistorized switching logic circuits with tunnel diodes
[NASA-CASE-GSC-10878-1] c10 N72-22236
Development of method and apparatus for detecting surface ions on silicon diodes and transistors
[NASA-CASE-ERC-10325] c15 N72-25457
Development of temperature compensated light source with components and circuitry for maintaining luminous intensity independent of temperature variations
[NASA-CASE-ARC-10467-1] c09 N73-14214
Silicon carbide backward diode with coated lead attachment
[NASA-CASE-ERC-10224-2] c09 N73-27150
High isolation RF signal selection switches
[NASA-CASE-NPO-13081-1] c33 N74-22814
Logarithmic circuit with wide dynamic range
[NASA-CASE-GSC-12145-1] c33 N78-32339
Regulated high efficiency, lightweight capacitor-diode multiplier dc to dc converter
[NASA-CASE-LBW-12791-1] c33 N78-32341
Thermal compensator for closed-cycle helium refrigerator --- assuring constant temperature for an infrared laser diode
[NASA-CASE-GSC-12168-1] c31 N79-17029
Power converter --- for display devices, lighting equipment
[NASA-CASE-FRC-11014-1] c33 N79-27395
- DIPLOLE ANTENNAS**
Circularly polarized antenna with linearly polarized pair of elements
[NASA-CASE-ERC-10214] c09 N72-31235
- DIRECT CURRENT**
Regulated dc to dc converter
[NASA-CASE-XGS-03429] c03 N69-21330
Automatic control of voltage supply to direct current motor
[NASA-CASE-XMS-04215-1] c09 N69-39587
Thermionic diode switch for use in high temperature region to chop current from dc source
[NASA-CASE-NPO-10404] c03 N71-12255
Transistorized dc-coupled multivibrator with noninverted output signal
[NASA-CASE-XNP-09450] c10 N71-18723
Stepping motor control apparatus exciting windings in proper time sequence to cause motor to rotate in either direction
[NASA-CASE-GSC-10366-1] c10 N71-18772
Frequency control network for current feedback oscillators converting dc voltage to ac or higher dc voltages
[NASA-CASE-GSC-10041-1] c10 N71-19418
Direct current powered self repeating plasma accelerator with interconnected annular and linear discharge channels
[NASA-CASE-XLA-03103] c25 N71-21693
Conversion of positive dc voltage to positive dc voltage of lower amplitude
[NASA-CASE-XMP-14301] c09 N71-23188
Converting output of positive dc voltage source to negative dc voltage across load with common reference point
[NASA-CASE-XMP-08217] c03 N71-23239
Blood pressure measuring system for separately recording dc and ac pressure signals of Korotkoff sounds
[NASA-CASE-XMS-06061] c05 N71-23317
Radio frequency coaxial filter to provide dc isolation and low frequency signal rejection in audio range
[NASA-CASE-XGS-01418] c09 N71-23573
Brushless dc tachometer design with Hall effect crystals and output voltage magnitude proportional to rotor speed
[NASA-CASE-MFS-20385] c09 N71-24904
Inverters for changing direct current to alternating current
[NASA-CASE-XGS-06226] c10 N71-25950
Circuits for controlling reversible dc motor
[NASA-CASE-XNP-07477] c09 N71-26092
Feedback control for direct current motor to achieve constant speed under varying loads
[NASA-CASE-MFS-14610] c09 N71-28886
High dc switch for causing abrupt, cyclic, decreases of current to operate under zero or varying gravity conditions
[NASA-CASE-LBW-10155-1] c09 N71-29035
Power converters for supplying direct current at one voltage from source at another voltage
[NASA-CASE-XER-11046] c09 N72-22203
Dc to ac to dc converter with transistor driven synchronous rectifiers
[NASA-CASE-GSC-11126-1] c09 N72-25253
Direct current motor including stationary field windings and stationary armature winding
[NASA-CASE-XGS-07805] c15 N72-33476
Powerplexer for distribution of dc power levels to loads which require different voltages
[NASA-CASE-MSC-12396-1] c03 N73-31988
Bio-isolated dc operational amplifier --- for bioelectric measurements
[NASA-CASE-ARC-10596-1] c33 N74-21851
Load insensitive electrical device --- power converters for supplying direct current at one voltage from a source at another voltage
[NASA-CASE-XER-11046-2] c33 N74-22864
Differential pulse code modulation
[NASA-CASE-MSC-12506-1] c32 N77-12239
Three phase full wave dc motor decoder
[NASA-CASE-GSC-11824-1] c33 N77-26386
Time domain phase measuring apparatus
[NASA-CASE-GSC-12228-1] c33 N79-10338
Direct current transformer
[NASA-CASE-MFS-23659-1] c33 N79-17133
Elimination of current spikes in buck power converters
[NASA-CASE-NPO-14505-1] c33 N81-19393
Controller for computer control of brushless dc motors --- automobile engines
[NASA-CASE-NPO-13970-1] c33 N81-20352
- DIRECT LIFT CONTROLS**
Velocity vector control system augmented with direct lift control
[NASA-CASE-LAR-12268-1] c08 N81-24106
- DIRECT POWER GENERATORS**
Direct conversion of thermal energy into electrical energy using crossed electric and magnetic fields
[NASA-CASE-XLE-00212] c03 N70-34134
Thermal pump-compressor for converting solar energy
[NASA-CASE-XLA-00377] c33 N71-17610
Converting output of positive dc voltage source to negative dc voltage across load with common reference point
[NASA-CASE-XMP-08217] c03 N71-23239
Unsaturating magnetic core transformer design with warning signal for electrical power processing equipment

[NASA-CASE-ERC-10125] c09 N71-24893
Load insensitive electrical device --- power converters for supplying direct current at one voltage from a source at another voltage
[NASA-CASE-YER-11046-2] c33 N74-22864

DIRECTIONAL ANTENNAS
Mechanical coordinate converter for use with spacecraft tracking antennas
[NASA-CASE-INP-00614] c14 N70-36907
Weatherproof helix antenna
[NASA-CASE-XKS-08485] c07 N71-19493
Tracking antenna system with array for synchronous satellite or ground based radar
[NASA-CASE-GSC-10553-1] c07 N71-19854
Drive system for parabolic tracking antenna with reversible motion and minimal backlash
[NASA-CASE-NPO-10173] c15 N71-24696
Variable beamwidth antenna --- with multiple beam, variable feed system
[NASA-CASE-GSC-11862-1] c32 N76-18295
An improved suspension system for a wheel rolling on a flat track --- bearings for directional antennas
[NASA-CASE-NPO-14395-1] c37 N79-12446

DIRECTIONAL CONTROL
Gimbaled partially submerged nozzle for solid propellant rocket engines for providing directional control
[NASA-CASE-INP-01544] c28 N70-34162
Omnidirectional wheel
[NASA-CASE-MFS-21309-1] c37 N74-18125
Velocity vector control system augmented with direct lift control
[NASA-CASE-IAR-12268-1] c08 N81-24106

DIRECTIONAL SOLIDIFICATION (CRYSTALS)
Preparation of monotectic alloys having a controlled microstructure by directional solidification under dopant-induced interface breakdown
[NASA-CASE-MFS-23816-1] c26 N80-23419

DIRECTIONAL STABILITY
Nose gear steering system for vehicles with main skids to provide directional stability after loss of aerodynamic control
[NASA-CASE-XLA-01804] c02 N70-34160
System for imposing directional stability on a rocket-propelled vehicle
[NASA-CASE-MFS-21311-1] c20 N76-21275

DIRECTIVITY
Multiprism collimator
[NASA-CASE-GSC-12608-1] c35 N81-12387

DISCONNECT DEVICES
Patent data on gas actuated bolt disconnect assembly
[NASA-CASE-XLA-00326] c03 N70-34667
Remotely actuated quick disconnect mechanism for umbilical cables
[NASA-CASE-XLA-00711] c03 N71-12258
Remotely actuated quick disconnect for tubular umbilical conduits used to transfer fluids from ground to rocket vehicle
[NASA-CASE-XLA-01396] c03 N71-12259
Design and development of quick release connector
[NASA-CASE-XLA-01141] c15 N71-13789
Split nut and bolt separation device
[NASA-CASE-INP-06914] c15 N71-21489
Electrical circuit selection device for simulating stage separation of flight vehicle
[NASA-CASE-XKS-04631] c10 N71-23663
Quick disconnect duct coupling device for single-handed operation
[NASA-CASE-MFS-20395] c15 N71-24903
Breakaway multiwire electrical cable connector with particular application for umbilical type cables
[NASA-CASE-NPO-11140] c15 N72-17455
Torsional disconnect device for releasably coupling distal ends of fluid conduits
[NASA-CASE-NPO-10704] c15 N72-20445
Frangible connecting link suitable for rocket stage separation
[NASA-CASE-MSC-11849-1] c15 N72-22488
Gas operated quick disconnect coupling for umbilical connectors
[NASA-CASE-NPO-11202] c15 N72-25450
Quick disconnect filter coupling
[NASA-CASE-MFS-22323-1] c37 N76-14463
Positive isolation disconnect
[NASA-CASE-MSC-16043-1] c37 N79-11402

DISCONTINUITY

Servocontrol system for measuring local stresses at geometric discontinuity in stressed material
[NASA-CASE-XLA-08530] c32 N71-25360

DISCRIMINATORS

Detector assembly for discriminating first signal with respect to presence or absence of second signal at time of occurrence of first signal
[NASA-CASE-INP-00701] c09 N70-40272
Difference indicating circuit used in conjunction with device measuring gravitational fields
[NASA-CASE-INP-08274] c10 N71-13537
Describing frequency discriminator using digital logic circuits and supplying single binary output signal
[NASA-CASE-MFS-14322] c08 N71-18692
Characteristics of comparator circuits for comparison of binary numbers in information processing system
[NASA-CASE-INP-04819] c08 N71-23295
Diode-quad bridge circuit means
[NASA-CASE-ARC-10364-3] c33 N75-19520
Diode-quad bridge circuit means
[NASA-CASE-ARC-10364-2] c33 N75-25041
Discriminator aided phase lock acquisition for suppressed carrier signals
[NASA-CASE-NPO-14311-1] c32 N79-14276

DISPENSERS

Liquid aerosol dispenser with explosively driven piston to compress light gas to extremely high pressure
[NASA-CASE-MFS-20829] c12 N72-21310
Potable water dispenser
[NASA-CASE-MFS-21115-1] c54 N74-12779
Lyophilized spore dispenser
[NASA-CASE-IAR-10544-1] c37 N74-13178
Metering gun for dispensing precisely measured charges of fluid
[NASA-CASE-MFS-21163-1] c54 N74-17853
Automatic fluid dispenser
[NASA-CASE-ARC-10820-1] c35 N78-19466

DISPERSING

Apparatus for mechanically dispersing ultrafine metal powders subjected to shock waves
[NASA-CASE-XLE-04946] c17 N71-24911

DISPERSIONS

Method for producing alkali metal dispersions of high purity
[NASA-CASE-INP-08876] c17 N73-28573

DISPLACEMENT

Bimetallic fluid displacement apparatus --- for stirring and heating stored gases and liquids
[NASA-CASE-ARC-10441-1] c35 N74-15126

DISPLACEMENT MEASUREMENT

Null-type vacuum microbalance for measuring minute mechanical displacements
[NASA-CASE-XAC-00472] c15 N70-40180
Development and characteristics of self-calibrating displacement transducer for measuring magnitude and frequency of displacement of bodies
[NASA-CASE-XLA-00781] c09 N71-22999
Gas bearing for model support with capacity for measuring angular displacement of model in bearing
[NASA-CASE-XLA-09346] c15 N71-28740
Method and apparatus for remote measurement of displacement of marks on specimen undergoing tensile test
[NASA-CASE-NPO-10778] c14 N72-11364
Miniature muscle displacement transducer
[NASA-CASE-NFO-13519-1] c33 N76-19338
Simultaneous muscle force and displacement transducer
[NASA-CASE-NFO-14212-1] c52 N80-27072

DISPLAY DEVICES

Integrated time shared instrumentation display for aerospace vehicle simulators
[NASA-CASE-XLA-01952] c08 N71-12507
Data processing and display system for terminal guidance of X-15 aircraft
[NASA-CASE-XPR-00756] c02 N71-13421
Fluidic-thermochromic display device
[NASA-CASE-ERC-10031] c12 N71-18603
Cathode ray tube system for displaying ones and zeros in binary wave train
[NASA-CASE-XGS-04987] c08 N71-20571

- Optical projector system for establishing optimum arrangement of instrument displays in aircraft, spacecraft, other vehicles, and industrial instrument consoles
[NASA-CASE-XNP-03853] c23 N71-21882
- Optical monitor, panel consisting of translucent screen with test or meter information projected onto it from rear for application in control rooms of missile launching and tracking stations
[NASA-CASE-XKS-03509] c14 N71-23175
- Binary to decimal decoder logic circuit design with feedback control and display device
[NASA-CASE-XKS-06167] c08 N71-24890
- Noninterruptable digital counter circuit design with display device for pulse frequency modulation
[NASA-CASE-XNP-09759] c08 N71-24891
- Data acquisition system for converting displayed analog signal to digital values
[NASA-CASE-NPO-10344] c10 N71-26544
- Plasma-fluidic hybrid display system combining high brightness and memory characteristics
[NASA-CASE-ERC-10100] c09 N71-33519
- System for digitizing graphic displays
[NASA-CASE-NPO-10745] c08 N72-22164
- Digital video system for displaying image and alphanumeric data on cathode ray tube
[NASA-CASE-NPO-11342] c09 N72-25248
- Development of apparatus for mounting scientific experiments in spacecraft to permit utilization without maneuvering spacecraft
[NASA-CASE-MSC-12372-1] c31 N72-25842
- Situational display system of cathode ray tubes to assist pilot in aircraft control
[NASA-CASE-ERC-10350] c14 N73-20474
- Transparent switchboard which permits optical display devices to be adapted for use in man machine communications
[NASA-CASE-MSC-13746-1] c10 N73-32143
- Recorder/processor apparatus --- for optical data processing
[NASA-CASE-GSC-11553-1] c35 N74-15831
- Rotating raster generator
[NASA-CASE-FRC-10071-1] c32 N74-20813
- G-load measuring and indicator apparatus --- for aircraft
[NASA-CASE-ARC-10806] c06 N74-27872
- X-Y alphanumeric character generator for oscilloscopes
[NASA-CASE-GSC-11582-1] c33 N75-19517
- Binocular device for displaying numerical information in field of view
[NASA-CASE-LAR-11782-1] c74 N77-20882
- Particle parameter analyzing system --- x-y plotter circuits and display
[NASA-CASE-XLE-06094] c33 N78-17293
- Projection system for display of parallax and perspective
[NASA-CASE-MFS-23194-1] c35 N78-17357
- Full color hybrid display for aircraft simulators --- landing aids
[NASA-CASE-ARC-10903-1] c09 N78-18083
- Chromatically corrected virtual image display --- lens design for flight simulators
[NASA-CASE-LAR-12251-1] c74 N79-14892
- Miniature implantable ultrasonic echosonometer
[NASA-CASE-ARC-11035-1] c52 N79-18580
- System and method for obtaining wide screen Schlieren photographs
[NASA-CASE-NPO-14174-1] c74 N79-20856
- A system for providing an integrated display of instantaneous information relative to aircraft attitude, heading, altitude, and horizontal situation
[NASA-CASE-FRC-11005-1] c06 N79-24988
- Power converter --- for display devices, lighting equipment
[NASA-CASE-FRC-11014-1] c33 N79-27395
- Environmental fog/rain visual display system for aircraft simulators
[NASA-CASE-ARC-11158-1] c09 N79-33220
- An image readout device with electrically variable spatial resolution
[NASA-CASE-LAR-12633-1] c35 N80-22661
- Chromatically corrected virtual image visual display --- reducing eye strain in flight simulators
[NASA-CASE-LAR-12251-1] c74 N80-27185
- System for a displaying at a remote station data generated at a central station and for powering the remote station from the central station
[NASA-CASE-GSC-12411-1] c33 N81-14221
- DISSIPATION
Dissipative voltage regulator system for minimizing heat dissipation
[NASA-CASE-GSC-10891-1] c10 N71-26626
- DISSOCIATION
Solar hydrogen generator
[NASA-CASE-LAR-11361-1] c44 N77-22607
- DISSOLVING
Apparatus for mixing two or more liquids under zero gravity conditions
[NASA-CASE-LAR-10195-1] c15 N73-19458
- DISTANCE MEASURING EQUIPMENT
Binary coded sequential acquisition ranging system for distance measurements
[NASA-CASE-NPO-11194] c08 N72-25209
- Apparatus for determining distance to lighting strokes from single station by magnetic and electric field sensing antennas
[NASA-CASE-KSC-10698] c07 N73-20175
- Terminal guidance sensor system --- space shuttle coupling to orbiting satellites
[NASA-CASE-NPO-14521-1] c37 N81-27519
- DISTILLATION EQUIPMENT
Utilization of solar radiation by solar still for converting salt and brackish water into potable water
[NASA-CASE-XMS-04533] c15 N71-23086
- Purification apparatus for vaporization and fractional distillation of liquids
[NASA-CASE-XNP-08124] c15 N71-27184
- U shaped heated tube for distillation and purification of liquid metals
[NASA-CASE-XNP-08124-2] c06 N73-13129
- DISTRIBUTED AMPLIFIERS
Broadband distribution amplifier with complementary pair transistor output stages
[NASA-CASE-NPO-10003] c10 N71-26415
- DISTRIBUTORS
High voltage distributor
[NASA-CASE-GSC-11849-1] c33 N76-16332
- DIVERGENT NOZZLES
Jet exhaust noise suppressor
[NASA-CASE-LEW-11286-1] c07 N74-27490
- DIVERTERS
Flow diverter valve and flow diversion method
[NASA-CASE-HQN-00573-1] c37 N79-33468
- DIVIDERS
A synchronous binary array divider
[NASA-CASE-ERC-10180-1] c60 N74-20836
- DOCUMENT STORAGE
Describing device for flagging punched business cards
[NASA-CASE-XLA-02705] c08 N71-15908
- DOORS
Design and specifications of emergency escape system for spacecraft structures
[NASA-CASE-MSC-12086-1] c05 N71-12345
- Fiberglass/epoxy composite automotive door structure including a glass-reinforced intrusion strip
[NASA-CASE-NFO-15057-1] c24 N81-19230
- DOPPLER EFFECT
Doppler frequency shift correction device for multiplex communication with Applications Technology Satellites
[NASA-CASE-XGS-02749] c07 N69-39978
- Describing laser Doppler velocimeter for measuring mean velocity and turbulence of fluid flow
[NASA-CASE-MFS-20386] c21 N71-19212
- Doppler compensated communication system for locating supersonic transport position
[NASA-CASE-GSC-10087-4] c07 N73-20174
- Doppler shift system --- system for measuring velocities of radiating particles
[NASA-CASE-HQN-10740-1] c72 N74-19310
- Method and apparatus for Doppler frequency modulation of radiation
[NASA-CASE-NFO-14524-1] c32 N80-24510
- An electro-optical Doppler tracker means and method for optical correlation of synthetic aperture radar data
[NASA-CASE-NPO-14998-1] c33 N81-15194

DOPPLER RADAR

Cooperative Doppler radar system for avoiding midair collisions
[NASA-CASE-LAR-10403] c21 N71-11766

Multibeam single frequency synthetic aperture radar processor for imaging separate range swaths
[NASA-CASE-NPO-14525-2] c32 N80-32607

Doppler radar having phase modulation of both transmitted and reflected return signals --- range-finding
[NASA-CASE-HSC-18675-1] c32 N81-29312

DOSIMETERS

Development of dosimeter for measuring absorbed dose of high energy ionizing radiation
[NASA-CASE-XLA-03645] c14 N71-20430

Miniature spectrally selective dosimeter
[NASA-CASE-LAR-12469-1] c35 N81-12388

DRAG CHUTES

Deployment system for flexible wing with rigid superstructure
[NASA-CASE-XLA-01220] c02 N70-41663

Lightweight, variable solidity knitted parachute fabric --- for aerodynamic decelerators
[NASA-CASE-LAR-10776-1] c02 N74-10034

DRAG MEASUREMENT

Device for measuring drag forces in flight tests
[NASA-CASE-XLA-00113] c14 N70-33386

Electric analog for measuring induced drag on nonplanar airfoils
[NASA-CASE-XLA-00755] c01 N71-13410

Electric analog for measuring induced drag on nonplanar airfoils
[NASA-CASE-XLA-05828] c01 N71-13411

Impact energy absorber with decreasing absorption rate
[NASA-CASE-XLA-01530] c14 N71-23092

System for use in conducting wake investigation for a wing in flight --- differential pressure measurements for drag investigations
[NASA-CASE-FRC-11024-1] c02 N80-28300

Skin friction measuring device for aircraft
[NASA-CASE-FRC-11029-1] c06 N81-17057

DRAG REDUCTION

Directed fluid stream for propeller blade loading control
[NASA-CASE-XAC-00139] c02 N70-34856

Aircraft wheel spray drag alleviator for dual tandem landing gear
[NASA-CASE-XLA-01583] c02 N70-36825

Improved method for driving two-phase turbines with enhanced efficiency
[NASA-CASE-NPO-15037-1] c37 N80-26660

Improved low-drag ground vehicle particularly suited for use in safely transporting livestock
[NASA-CASE-FRC-11058-1] c65 N80-33312

Leading edge vortex flaps for drag reduction --- during subsonic flight
[NASA-CASE-LAR-12750-1] c02 N81-19016

DRIFT (INSTRUMENTATION)

Automatic measuring and recording of gain and zero drift characteristics of electronic amplifier
[NASA-CASE-XMS-05562-1] c09 N69-39586

Solar radiation direction detector and device for compensating degradation of photocells
[NASA-CASE-XLA-00183] c14 N70-40239

Failure detection and control means for improved drift performance of a gimbaled platform system
[NASA-CASE-MFS-23551-1] c04 N76-26175

DRILL BITS

Impact bit for cutting, collecting, and storing samples such as lunar rock cuttings
[NASA-CASE-XNP-01412] c15 N70-42034

Hole cutter --- drill bits and rotating shaft
[NASA-CASE-MFS-22649-1] c37 N75-25186

DRILLING

Method for milling and drilling glass
[NASA-CASE-GSC-12636-1] c37 N80-29705

DRILLS

Rotary impact-type rock drill for recovering rock cuttings
[NASA-CASE-XNP-07478] c14 N69-21923

Auger-type soil penetrometer for burrowing into soil formations
[NASA-CASE-XNP-05530] c14 N73-32221

DRIVES

Inverter drive circuit for semiconductor switch
[NASA-CASE-LEW-10233] c10 N71-27126

DROPS (LIQUIDS)

Development of droplet monitoring probe for use in analysis of droplet propagation in mixed-phase fluid stream
[NASA-CASE-NPO-10985] c14 N73-20478

Method of forming frozen spheres in a force-free drop tower --- microballoons for inertial confinement fusion
[NASA-CASE-NPO-14845-1] c31 N81-16328

DRUGS

Automated analysis of oxidative metabolites
[NASA-CASE-ARC-10469-1] c25 N75-12086

DRYING

Drying chamber for photographic sheet material
[NASA-CASE-GSC-11074-1] c14 N73-28489

DRYING APPARATUS

Gas purged dry box glove reducing permeation of air or moisture into dry box or isolator by diffusion through glove
[NASA-CASE-XLE-02531] c05 N71-23080

DUCTED FANS

Cam-operated pitch-change apparatus
[NASA-CASE-LEW-13050-1] c07 N79-14095

DUCTS

Quick disconnect duct coupling device for single-handed operation
[NASA-CASE-MFS-20395] c15 N71-24903

Externally supported internally stabilized flexible duct joint
[NASA-CASE-MFS-19194-1] c37 N76-14460

Apparatus for supplying conditioned air at a substantially constant temperature and humidity
[NASA-CASE-GSC-12191-1] c31 N80-32583

DURABILITY

Belt for transmitting power from a cogged driving member to a cogged driven member
[NASA-CASE-GSC-12289-1] c37 N80-32717

DUST COLLECTORS

Device for removing plastic dust cover from digital computer disk packs for inspection and cleaning
[NASA-CASE-LAR-10590-1] c15 N70-26819

DYE LASERS

Infrared tunable dye laser with nonlinear wavelength mixing crystal in optical cavity
[NASA-CASE-ARC-10463-1] c09 N73-32111

Laser head for simultaneous optical pumping of several dye lasers --- with single flash lamp
[NASA-CASE-LAR-11341-1] c36 N75-19655

DYES

Dye penetrant and technique for nondestructive tests of solid surfaces contacted by liquid oxygen
[NASA-CASE-XMF-02221] c18 N71-27170

DYNAMIC CHARACTERISTICS

Dynamic sensor for gas pressure or density measurement
[NASA-CASE-XAC-02877] c14 N70-41681

Design of precision vertical alignment system using laser with gravitationally sensitive cavity
[NASA-CASE-ARC-10444-1] c16 N73-33397

Apparatus for and method of compensating dynamic unbalance
[NASA-CASE-GSC-12550-1] c37 N81-22358

DYNAMIC CONTROL

Motion restraining device
[NASA-CASE-NPO-13619-1] c37 N78-16369

DYNAMIC LOADS

Multilegged support system for wind tunnel test models subjected to thermal dynamic loading
[NASA-CASE-XLA-01326] c11 N71-21481

Apparatus for measuring load on cable under static or dynamic conditions comprising pulleys pivoting structure against restraint of tension strap
[NASA-CASE-XMS-04545] c15 N71-22878

Development and characteristics of device for indicating and recording magnitude of force applied in axial direction
[NASA-CASE-HSC-15626-1] c14 N72-25411

DYNAMIC MODULUS OF ELASTICITY

Apparatus for testing metallic and nonmetallic beams or rods by bending at high temperatures in vacuum or inert atmosphere
[NASA-CASE-XLE-01300] c15 N70-41993

DYNAMIC RESPONSE

Lunar and planetary gravity simulator to test vehicular response to landing

[NASA-CASE-XLA-00493] c11 N70-34786
Pressure sensor network for measuring liquid dynamic response in flight including fuel tank acceleration, liquid slosh amplitude, and fuel depth monitoring

[NASA-CASE-XLA-05541] c12 N71-26387
Response analyzing apparatus for liquid vapor interface sensor of sloshing rocket propellant

[NASA-CASE-MFS-11204] c14 N71-29134
Cam-operated pitch-change apparatus

[NASA-CASE-LEW-13050-1] c07 N79-14095
DYNAMIC STRUCTURAL ANALYSIS
Development of system for measuring damping characteristics of structure or system subjected to random forces or influences

[NASA-CASE-ARC-10154-1] c14 N72-22440
DYNAMIC TESTS
Hydraulic support equipment for full scale dynamic testing of large rocket vehicle under free flight conditions

[NASA-CASE-XMF-01772] c11 N70-41677
Hydraulic support apparatus for dynamic testing of space vehicles under near-free flight conditions

[NASA-CASE-XMF-03248] c11 N71-10604
DYNAMOMETERS
Dynamometer measuring microforce thrust produced by ion engine

[NASA-CASE-XLE-00702] c14 N70-40203
Development of thrust dynamometer for measuring performance of jet and rocket engines

[NASA-CASE-XLE-05260] c14 N71-20429

E

EAR
Ear oximeter for monitoring blood oxygenation and pressure, pulse rate, and pressure pulse curve, using dc and ac amplifiers

[NASA-CASE-XAC-05422] c04 N71-23185
EARTH (PLANET)
Camera arrangement --- for satellite scanning of earth or sky

[NASA-CASE-GSC-12032-2] c35 N76-19408
EARTH ATMOSPHERE
Ablation sensor for measuring surface ablation rate of material on vehicles entering earths atmosphere on entry into planetary atmospheres

[NASA-CASE-XLA-01791] c14 N71-22991
EARTH CRUST
Seismic vibration source

[NASA-CASE-NPO-14112-1] c46 N79-22679
EARTH ORBITS
Electric furnace for vacuum and zero gravity melting of high melting point materials during earth orbit

[NASA-CASE-MFS-20710] c11 N72-23215
Design and development of space shuttle system for delivering payload to earth orbit or celestial orbit

[NASA-CASE-MSC-12391] c30 N73-12884
ECCENTRICS
Hot gas engine with dual crankshafts

[NASA-CASE-NPO-14221-1] c37 N81-25370
ECHLETTE GRATINGS
Cooled echelle grating spectrometer --- for space telescope applications

[NASA-CASE-NPO-14372-1] c35 N80-26635
ECHORS
Miniature implantable ultrasonic echosonometer

[NASA-CASE-ARC-11035-1] c52 N79-18580
Echo tracker/range finder for radars and sonars

[NASA-CASE-NPO-14361-1] c32 N79-26253
EDGES
Method of forming a sharp edge on an optical device

[NASA-CASE-GSC-12348-1] c74 N80-24149
EFFICIENCY
Recovering efficiency of solar cells damaged by environmental radiation through thermal annealing

[NASA-CASE-XGS-04047-2] c03 N72-11062
High efficiency multifrequency feed

[NASA-CASE-GSC-11909] c32 N74-20863
EFFLUENTS
Vortex generator for controlling the dispersion of effluents in a flowing liquid

[NASA-CASE-LAR-12045-1] c34 N77-24423

Fluid sample collection and distribution system --- qualitative analysis of aqueous samples from several points

[NASA-CASE-MSC-16841-1] c34 N79-24285
EGRESS
Explosively activated egress area

[NASA-CASE-LAR-12624-1] c03 N81-29107
EJECTION
Apparatus for ejecting covers of instrument packages using differential pressure principle

[NASA-CASE-XMF-04132] c15 N69-27502
EJECTION SEATS
Ejector for separating astronaut from ejection seat during prelaunch or initial launch phase of flight

[NASA-CASE-XMS-04625] c05 N71-20718
EJECTORS
Automatic ejection valve for attitude control and midcourse guidance of space vehicles

[NASA-CASE-XMF-00676] c15 N70-38996
Ejector for separating astronaut from ejection seat during prelaunch or initial launch phase of flight

[NASA-CASE-XMS-04625] c05 N71-20718
Latching mechanism with pivoting catch and self-contained spring ejector

[NASA-CASE-XLA-03538] c15 N71-24897
ELASTIC BODIES
Belleville spring assembly with elastic guides having low hysteresis

[NASA-CASE-XMF-09452] c15 N69-27504
Development of systems for automatically and continually suppressing or attenuating bending motion in elastic bodies

[NASA-CASE-XAC-05632] c32 N71-23971
Device for measuring tensile forces

[NASA-CASE-MFS-21728-1] c35 N74-27865
ELASTIC DEFORMATION
Measuring shear-creep compliance of solid and liquid materials used in spacecraft components

[NASA-CASE-XLE-01481] c14 N71-10781
Development of systems for automatically and continually suppressing or attenuating bending motion in elastic bodies

[NASA-CASE-XAC-05632] c32 N71-23971
ELASTIC MEDIA
Miniature vibration isolator utilizing elastic tubing material

[NASA-CASE-XLA-01019] c15 N70-40156
ELASTIC PROPERTIES
Elastic universal joint for rocket motor mounting

[NASA-CASE-XMF-00416] c15 N70-36947
Resilient vehicle wheel for lunar surface travel

[NASA-CASE-MFS-20400] c31 N71-18611
Threadless fastener apparatus comprising receiving apertures for plurality of articles, self-locked condition, and capable of using nonmalleable materials in both ends

[NASA-CASE-XFR-05302] c15 N71-23254
Chemical and elastic properties of fluorinated polyurethanes

[NASA-CASE-NFO-10767-1] c06 N73-33076
Meter for use in detecting tension in straps having predetermined elastic characteristics

[NASA-CASE-MFS-22189-1] c35 N75-19615
ELASTIC SHEETS
Hot forming of plastic sheets

[NASA-CASE-XMS-05516] c15 N71-17803
ELASTOMERS
Describing metal valve pintle with encapsulated elastomeric body

[NASA-CASE-MSC-12116-1] c15 N71-17648
Development of apparatus for measuring successive increments of strain on elastomers

[NASA-CASE-XMF-04680] c15 N71-19489
Preparation of elastomeric diamine silazane polymers

[NASA-CASE-XMF-04133] c06 N71-20717
Leak resistant bonded elastomeric seal for secondary electrochemical cells

[NASA-CASE-IGS-02631] c03 N71-23006
Conductive elastomeric extensometer

[NASA-CASE-MFS-21049-1] c52 N74-27864
Vacuum pressure molding technique

[NASA-CASE-LAR-10073-1] c37 N76-24575
Method of making hollow elastomeric bodies

[NASA-CASE-NFO-13535-1] c37 N76-31524
Process for spinning flame retardant elastomeric compositions --- fabricating synthetic fibers

for high oxygen environments
[NASA-CASE-MSC-14331-3] c27 N78-32262

Curable liquid hydrocarbon prepolymers
containing hydroxyl groups and process for
producing same
[NASA-CASE-NPO-13137-1] c27 N80-32514

Prepolymer dianhydrides
[NASA-CASE-NPO-13899-1] c27 N80-32515

Viscoelastic cationic polymers containing the
urethane linkage
[NASA-CASE-NPO-10830-1] c27 N81-15104

Method of bonding plasticized elastomer to metal
and article produced thereby
[NASA-CASE-MFS-25181-1] c27 N81-16238

Process for the preparation of fluorine
containing crosslinked elastomeric
polytriazine and product so produced
[NASA-CASE-ARC-11248-1] c27 N81-17259

The 1,2,4-oxadiazole elastomers --- heat
resistant polymers
[NASA-CASE-ARC-11253-1] c27 N81-17262

Bifunctional monomers having terminal oxime and
cyano or amidine groups
[NASA-CASE-ARC-11253-3] c27 N81-24256

Circumferential shaft seal
[NASA-CASE-LEW-12119-2] c37 N81-26447

ELECTRETS

Charge injection method and apparatus of
producing large area electrets
[NASA-CASE-MFS-23186-1] c33 N76-23483

Charge injection method and apparatus of
producing large area electrets
[NASA-CASE-MFS-23186-2] c24 N78-25137

ELECTRIC ARCS

Magnetically diffused radial electric arc heater
[NASA-CASE-XLA-00330] c33 N70-34540

Controlled arc spot welding method
[NASA-CASE-XMF-00392] c15 N70-34814

Triggering system for electric arc driven
impulse wind tunnel
[NASA-CASE-XMF-00411] c11 N70-36913

Electric arc device for minimizing electrode
ablation and heating gases to supersonic or
hypersonic wind tunnel temperatures
[NASA-CASE-XAC-00319] c25 N70-41628

Electric arc heater with supersonic nozzle and
fixed arc length for use in high temperature
wind tunnels
[NASA-CASE-XAC-01677] c09 N71-20816

Arc electrode of graphite with tantalum ball tip
[NASA-CASE-XLE-04788] c09 N71-22987

High powered arc electrodes --- producing solar
simulator radiation
[NASA-CASE-LEW-11162-1] c33 N74-12913

Electric arc light source having undercut
recessed anode
[NASA-CASE-ARC-10266-1] c33 N75-29318

ELECTRIC BATTERIES

Spacecraft battery seals
[NASA-CASE-XGS-03864] c15 N69-24320

Sealed electric storage battery with gas
manifold interconnecting each cell
[NASA-CASE-XNP-03378] c03 N71-11051

Battery charging system with cell to cell
voltage balance
[NASA-CASE-XGS-05432] c03 N71-19438

Development and characteristics of battery
charging circuits with coulometer for control
of available current
[NASA-CASE-GSC-10487-1] c03 N71-24719

Heat activated emf cells with aluminum anode
[NASA-CASE-LEW-11359] c03 N71-28579

Development of device for simulating charge and
discharge cycle of battery in synchronous orbit
[NASA-CASE-GSC-11211-1] c03 N72-25020

Storage battery comprising negative plates of a
wedge shaped configuration --- for preventing
shape change induced malfunctions
[NASA-CASE-NPO-11806-1] c44 N74-19693

Battery testing device --- for testing cells of
multiple-cell battery
[NASA-CASE-MFS-20761-1] c44 N74-27519

Rapid activation and checkout device for batteries
[NASA-CASE-MFS-22749-1] c44 N76-14601

Zinc-halide battery with molten electrolyte
[NASA-CASE-NPO-11961-1] c44 N76-18643

Lead-oxygen dc power supply system having a
closed loop oxygen and water system
[NASA-CASE-MFS-23059-1] c44 N76-27664

Voltage regulator for battery power source ---
using a bipolar transistor
[NASA-CASE-FRC-10116-1] c33 N79-23345

In-situ cross linking of polyvinyl alcohol ---
application to battery separator films
[NASA-CASE-LEW-13135-2] c27 N81-24257

ELECTRIC BRIDGES

Pulsed excitation voltage circuit for strain
gage bridge transducers
[NASA-CASE-FRC-10036] c09 N72-22200

Bridge-type gain control circuit
[NASA-CASE-GSC-10786-1] c10 N72-28241

Diode-quad bridge circuit means
[NASA-CASE-ARC-10364-2] c33 N75-25041

Germanium coated microbridge and method
[NASA-CASE-MFS-23274-1] c33 N78-13320

Power converter --- for display devices,
lighting equipment
[NASA-CASE-FRC-11014-1] c33 N79-27395

ELECTRIC CELLS

Expanding and contracting connector strip for
solar cell array of Nimbus satellite
[NASA-CASE-XGS-01395] c03 N69-21539

Design and characteristics of heat activated
electric cell with anode made from one or more
alkali metals and cathode made from oxidizing
material
[NASA-CASE-LEW-11358] c03 N71-26084

Development and characteristics of ion-exchange
membrane and electrode assembly for fuel cells
or electrolysis cells
[NASA-CASE-XMS-02063] c03 N71-29044

ELECTRIC CHARGE

Indicator device for monitoring charge of wet
cell battery, using semiconductor light
emitter and photodetector
[NASA-CASE-NPO-10194] c03 N71-20407

Automatically charging battery of electric
storage cells
[NASA-CASE-XNP-04758] c03 N71-24605

ELECTRIC CHOPPERS

Monostable multivibrator for conserving power in
spacecraft systems
[NASA-CASE-GSC-10082-1] c10 N72-20221

Transformer regulated self-stabilizing chopper
[NASA-CASE-XGS-09186] c33 N78-17295

ELECTRIC COILS

Broadband chokes and absorbers to reduce
spurious radiation patterns of antenna array
caused by support structures
[NASA-CASE-XMS-05303] c07 N69-27462

ELECTRIC CONDUCTORS

Hollow spherical electrode for shielding
dielectric junction between high voltage
conductor and insulator
[NASA-CASE-XLE-03778] c09 N69-21542

Conductor for connecting parallel cells into
submodules in series to form solar cell matrix
[NASA-CASE-NPO-10821] c03 N71-19545

Electrical switching device comprising
conductive liquid confined within square loop
of deformable nonconductive tubing also used
for leveling
[NASA-CASE-NPO-10037] c09 N71-19610

Dry electrode design with wire sandwiched
between two flexible conductive discs for
monitoring physiological responses
[NASA-CASE-FRC-10029] c09 N71-24618

Development of process for forming insulating
layer between two electrical conductor or
semiconductor materials
[NASA-CASE-LEW-10489-1] c15 N72-25447

Improved injector with porous plug for bubbles
of gas into feed lines of electrically
conductive liquid
[NASA-CASE-NPO-11377] c15 N73-27406

Solar cell grid patterns
[NASA-CASE-NPO-13087-2] c44 N76-31666

Velocity measurement system
[NASA-CASE-MFS-23363-1] c35 N78-32396

Shielded conductor cable system
[NASA-CASE-MSC-12745-1] c33 N81-27397

ELECTRIC CONNECTORS

Distribution of currents to circuits using
electrical adaptor
[NASA-CASE-XLA-01288] c09 N69-21470

Fixture for simultaneously supporting several
components for electrical testing
[NASA-CASE-XNP-06032] c09 N69-21926

- Releasable coupling device designed to receive and retain matching ends of electrical connectors
[NASA-CASE-XMS-07846-1] c09 N69-21527
- Electrical feedthrough connection for printed circuit boards
[NASA-CASE-XMP-01483] c14 N69-27431
- Electrical connector pin with wiping action to assure reliable contact
[NASA-CASE-XMP-04238] c09 N69-39734
- Rectangular electric conductors for conductor cables to withstand spacecraft vibration and controlled atmosphere
[NASA-CASE-MFS-14741] c09 N70-20737
- Patent data on terminal insert connector for flat electric cables
[NASA-CASE-XMP-00324] c09 N70-34596
- Electric connector for printed cable to printed cable or to printed board
[NASA-CASE-XMP-00369] c09 N70-36494
- Electrical connection for printed circuits on common board, using bellows principle in rivet
[NASA-CASE-XNP-05082] c15 N70-41960
- Method of making molded electric connector for use with flat conductor cables
[NASA-CASE-XMP-03498] c15 N71-15586
- Design and development of electric connectors for rigid and semirigid coaxial cables
[NASA-CASE-XNP-04732] c09 N71-20651
- Connector internal force gage for measuring strength of electrical connection
[NASA-CASE-XNP-03918] c14 N71-23087
- Maintaining current flow through solar cells with open connection using shunting diode
[NASA-CASE-XLE-04535] c03 N71-23354
- Electrical connections for thin film hybrid microcircuits
[NASA-CASE-XMS-02182] c10 N71-28783
- Breakaway multiwire electrical cable connector with particular application for umbilical type cables
[NASA-CASE-NPO-11140] c15 N72-17455
- Reliability of electrical connectors after heat sterilization
[NASA-CASE-NPO-10694] c09 N72-20200
- Development of electric connector and pin assembly with radio frequency absorbing sleeve to reduce radio frequency interference
[NASA-CASE-XLA-02609] c09 N72-25256
- Electrical interconnection of unilluminated solar cells in solar battery array
[NASA-CASE-GSC-10344-1] c03 N72-27053
- Separable flat cable connector with isolated electrical contacts
[NASA-CASE-MFS-20757] c09 N72-28225
- Device for configuring multiple leads --- method for connecting electric leads to printed circuit board
[NASA-CASE-MFS-22133-1] c33 N74-26977
- Connector --- for connecting circuits on different layers of multilayer printed circuit boards
[NASA-CASE-LAR-11709-1] c37 N76-27567
- Percutaneous connector device
[NASA-CASE-KSC-10849-1] c52 N77-14738
- Magnetic electrical connectors for biomedical percutaneous implants
[NASA-CASE-KSC-11030-1] c52 N77-25772
- Electrical self-aligning connector
[NASA-CASE-MFS-25211-1] c33 N80-32651
- Decommutator patchboard verifier
[NASA-CASE-KSC-11065-1] c33 N81-26359
- ELECTRIC CONTACTS**
- Solid state switching circuit design to increase current capacity of low rated relay contacts
[NASA-CASE-XNP-09228] c09 N69-27500
- Characteristics of hermetically sealed electric switch with flexible operating capability
[NASA-CASE-XNP-09808] c09 N71-12518
- Electrode connection for n-on-p silicon solar cell
[NASA-CASE-XLE-04787] c03 N71-20492
- Development of slip ring assembly with inner and outer peripheral surfaces used as electrical contacts for brushes
[NASA-CASE-XMP-01049] c15 N71-23049
- Separable flat cable connector with isolated electrical contacts
[NASA-CASE-MFS-20757] c09 N72-28225
- Electrostatic measurement system --- for contact-electrifying a dielectric
[NASA-CASE-MFS-22129-1] c33 N75-18477
- Process for preparing liquid metal electrical contact device
[NASA-CASE-LEW-11978-1] c33 N77-26385
- ELECTRIC CONTROL**
- Switching series regulator with gating control network
[NASA-CASE-XMS-09352] c09 N71-23316
- ELECTRIC CORONA**
- Charge injection method and apparatus of producing large area electrets
[NASA-CASE-MFS-23186-1] c33 N76-23483
- ELECTRIC CURRENT**
- Including didymium hydrate in nickel hydroxide of positive electrode of storage batteries to increase ampere hour capacity
[NASA-CASE-XGS-03505] c03 N71-10608
- Development of in-line fuse device for protection of electric circuits from excessive currents and voltages
[NASA-CASE-MSC-12135-1] c09 N71-12526
- Micromicroampere current measuring circuit, with two subminiature thermionic diodes with filament cathodes
[NASA-CASE-XNP-00384] c09 N71-13530
- Connector internal force gage for measuring strength of electrical connection
[NASA-CASE-XNP-03918] c14 N71-23087
- Electric circuit for producing high current pulse having fast rise and fall time
[NASA-CASE-XMS-04919] c09 N71-23270
- Electric circuit for reversing direction of current flow
[NASA-CASE-XNP-00952] c10 N71-23271
- Maintaining current flow through solar cells with open connection using shunting diode
[NASA-CASE-XLE-04535] c03 N71-23354
- Color television system utilizing single gun current sensitive color cathode ray tube
[NASA-CASE-ERC-10098] c09 N71-28618
- Current dependent variable inductance for input filter chokes of ac or dc power supplies
[NASA-CASE-ERC-10139] c09 N72-17154
- Amplifying circuit with constant current source for accumulator load and high gain voltage amplification
[NASA-CASE-EFC-11023] c09 N72-17155
- Commutator for steering precisely controlled bidirectional currents through numerous loads by use of magnetic core shift registers
[NASA-CASE-NPO-10743] c08 N72-21199
- Current protection equipment for saturable core transformers
[NASA-CASE-ERC-10075-2] c09 N72-22196
- Development of thermal to electric power conversion system using solid state switches of electrical currents to load for Seebeck effect compensation
[NASA-CASE-NPO-11388] c03 N72-23048
- Load current sensor for series pulse width modulated power supply
[NASA-CASE-GSC-10656-1] c09 N72-25249
- Electrode with multiple columnar conductors for limiting field emission current
[NASA-CASE-ERC-10015-2] c10 N72-27246
- Means of vapor deposition using electric current and evaporator filament
[NASA-CASE-LAR-10541-1] c15 N72-32487
- Lightning current measuring systems
[NASA-CASE-KSC-10807-1] c33 N75-26246
- Overload protection system for power inverter
[NASA-CASE-NPO-13872-1] c33 N78-10377
- Shunt regulation electric power system
[NASA-CASE-GSC-10135] c33 N78-17296
- Lightning current waveform measuring system
[NASA-CASE-KSC-11018-1] c33 N79-10337
- Electroexplosive device
[NASA-CASE-NPO-13858-1] c28 N79-11231
- Remote lightning monitor system
[NASA-CASE-KSC-11031-1] c33 N79-11315
- Lightning current detector
[NASA-CASE-KSC-11057-1] c33 N79-14305
- Driver for solar cell I-V characteristic plots
[NASA-CASE-NPO-14096-1] c44 N80-18551
- Electrical power generating system --- for windpowered generation
[NASA-CASE-MFS-24368-3] c33 N81-22280

ELECTRIC DISCHARGES

- Electric discharge apparatus for electrohydraulic explosive forming
[NASA-CASE-XMF-00375] c15 N70-34249
- High voltage pulse generator for testing flash and ignition limits of nonmetallic materials in controlled atmospheres
[NASA-CASE-MSC-12178-1] c09 N71-13518
- Pulse generating circuit for operation at very high duty cycles and repetition rates
[NASA-CASE-XNP-00745] c10 N71-28960
- Rapidly pulsed, high intensity, incoherent light source
[NASA-CASE-XLE-2529-3] c33 N74-20859
- Voltage feed through apparatus having reduced partial discharge
[NASA-CASE-GSC-12347-1] c33 N80-18286

ELECTRIC ENERGY STORAGE

- Electric current measuring apparatus design including saturable core transformer and energy storage device to avoid magnetizing current errors from transformer output winding
[NASA-CASE-XGS-02439] c14 N71-19431
- Lead-oxygen dc power supply system having a closed loop oxygen and water system
[NASA-CASE-MFS-23059-1] c44 N76-27664
- Electrically rechargeable REDOX flow cell
[NASA-CASE-LEW-12220-1] c44 N77-14581
- Gels as battery separators for rechargeable electrode cells
[NASA-CASE-LEW-12364-1] c44 N77-22606
- Electrochemical cell for rebalancing REDOX flow system
[NASA-CASE-LEW-12150-1] c44 N79-26474
- Toroidal cell and battery --- storage battery for high amp-hour load applications
[NASA-CASE-LEW-12918-1] c44 N81-24521

ELECTRIC EQUIPMENT

- Characteristics of high power, low distortion, alternating current power amplifier
[NASA-CASE-LAR-10218-1] c09 N70-34559
- Design and development of electric generator for space power system
[NASA-CASE-XLE-04250] c09 N71-20446
- Development of electrical system for measuring high impedance
[NASA-CASE-XMS-08589-1] c09 N71-20569
- Design, development, and operating principles of power supply with starting circuit which is independent of voltage regulator
[NASA-CASE-XMS-01991] c09 N71-21449
- Development of method for improving signal to noise ratio and accuracy of Wheatstone bridge type radiation measuring instrument
[NASA-CASE-XLA-02810] c14 N71-25901
- Design and development of buck-boost voltage regulator circuit with additive or subtractive alternating current impressed on variable direct current source voltage
[NASA-CASE-GSC-10735-1] c10 N71-26685
- Development and characteristics of electronically resettable fuse with saturable core current sensing transformer having two outside legs and center leg
[NASA-CASE-XGS-11177] c09 N71-27001
- Development and characteristics of voltage regulator for connection in series with alternating current source and load using three leg, two-window transformer
[NASA-CASE-ERC-10113] c09 N71-27053
- Development of electric circuit for production of different pulse width signals
[NASA-CASE-XLA-07788] c09 N71-29139
- Development of solar energy powered heliotrope assembly to orient solar array toward sun
[NASA-CASE-GSC-10945-1] c21 N72-31637
- Development of temperature compensated light source with components and circuitry for maintaining luminous intensity independent of temperature variations
[NASA-CASE-ARC-10467-1] c09 N73-14214
- Development and characteristics of hermetically sealed coaxial package for containing microwave semiconductor components
[NASA-CASE-GSC-10791-1] c15 N73-14469
- Overvoltage protection network
[NASA-CASE-ARC-10197-1] c33 N74-17929
- Sprag solenoid brake --- development and operations of electrically controlled brake

- [NASA-CASE-MFS-21846-1] c37 N74-26976
- Shock absorbing mount for electrical components
[NASA-CASE-NFO-13253-1] c37 N75-18573
- Self-regulating proportionally controlled heating apparatus and technique
[NASA-CASE-GSC-11752-1] c77 N75-20140
- ELECTRIC EQUIPMENT TESTS**
- Fixture for simultaneously supporting several components for electrical testing
[NASA-CASE-XNP-06032] c09 N69-21926
- Electrical testing apparatus for detecting amplitude and width of transient pulse
[NASA-CASE-XMF-06519] c09 N71-12519
- Variable water load for dissipating large amounts of electrical power during high voltage power supply tests
[NASA-CASE-XNP-05381] c09 N71-20842
- ELECTRIC FIELD STRENGTH**
- Low impedance apparatus for measuring electrostatic field intensity near space vehicles
[NASA-CASE-XLE-00820] c14 N71-16014
- Space environment simulation system for measuring spacecraft electric field strength in plasma sheath
[NASA-CASE-XLE-02038] c09 N71-16086
- Device for measuring two orthogonal components of force with gallium flotation of measuring target for use in vacuum environments
[NASA-CASE-XAC-04885] c14 N71-23790
- Apparatus to determine electric field strength by measuring deflection of electron beam impinging on target
[NASA-CASE-XMF-06617] c09 N71-24843
- ELECTRIC FIELDS**
- Electric analog for measuring induced drag on nonplanar airfoils
[NASA-CASE-XLA-00755] c01 N71-13410
- Electric analog for measuring induced drag on nonplanar airfoils
[NASA-CASE-XLA-05828] c01 N71-13411
- Instrument for measuring potentials on two dimensional electric field plot
[NASA-CASE-XLA-08493] c10 N71-19421
- Electron beam deflection devices for measuring electric fields
[NASA-CASE-XMF-10289] c14 N71-23699
- Electrodes having array of small surfaces for field ionization
[NASA-CASE-ERC-10013] c09 N71-26678
- Apparatus for determining distance to lighting strokes from single station by magnetic and electric field sensing antennas
[NASA-CASE-KSC-10698] c07 N73-20175
- Development and characteristics of apparatus for measuring intensity of electric field in atmosphere
[NASA-CASE-KSC-10730-1] c14 N73-32318
- Electric field measuring and display system --- for cloud formations
[NASA-CASE-KSC-10731-1] c33 N74-27862
- ELECTRIC FILTERS**
- Describing static inverter with single or multiple phase output
[NASA-CASE-XMF-00663] c08 N71-18752
- Apparatus for filtering input signals
[NASA-CASE-NFO-10198] c09 N71-24806
- Active RC filter networks and amplifiers for deep space magnetic field measurement
[NASA-CASE-XAC-05462-2] c10 N72-17171
- Multiloop RC active filter network with low parameter sensitivity and low amplifier gain
[NASA-CASE-ARC-10192] c09 N72-21245
- Development of electric connector and pin assembly with radio frequency absorbing sleeve to reduce radio frequency interference
[NASA-CASE-XLA-02609] c09 N72-25256
- Filter for third order phase locked loops in signal receivers
[NASA-CASE-NFO-11941-1] c10 N73-27171
- ELECTRIC FUSES**
- Development of in-line fuse device for protection of electric circuits from excessive currents and voltages
[NASA-CASE-MSC-12135-1] c09 N71-12526
- Single electrical circuit component combining diode, fuse, and blown indicator with elongated tube of heat resistant transparent material

- [NASA-CASE-IKS-03381] c09 N71-22796
Fused switch
[NASA-CASE-XMS-01244-1] c33 N79-33393
- ELECTRIC GENERATORS**
Regulated dc to dc converter
[NASA-CASE-IGS-03429] c03 N69-21330
Design and development of electric generator for space power system
[NASA-CASE-XLE-04250] c09 N71-20446
Development and characteristics of single or double pulse generator which produces constant width pulses in nanosecond region
[NASA-CASE-IGS-03427] c10 N71-23029
Development of slip ring assembly with inner and outer peripheral surfaces used as electrical contacts for brushes
[NASA-CASE-XMF-01049] c15 N71-23049
Conversion of positive dc voltage to positive dc voltage of lower amplitude
[NASA-CASE-XMF-14301] c09 N71-23188
High temperature ferromagnetic cobalt-base alloy for electrical power generating equipment
[NASA-CASE-XLE-03629] c17 N71-23248
Solid state integrator for converting variable width pulses into analog voltage
[NASA-CASE-XLA-03356] c10 N71-23315
Electric power system with circulatory liquid coolant cooling system
[NASA-CASE-MFS-14114-2] c09 N71-24807
Device utilizing RC rate generators for continuous slow speed measurement
[NASA-CASE-XMF-02966] c10 N71-24863
Device for voltage conversion using controlled pulse widths and arrangements to generate ac output voltage
[NASA-CASE-MFS-10068] c10 N71-25139
Multiple varactor for generating high frequencies with high power and high conversion efficiency
[NASA-CASE-XMF-04958-1] c10 N71-26414
Circuit design for failure sensing and protecting low voltage electric generator and power transmission networks
[NASA-CASE-GSC-10114-1] c10 N71-27366
Electric power system with thermionic diodes and circulatory liquid metal coolant lines
[NASA-CASE-MFS-14114] c33 N71-27862
Power converters for supplying direct current at one voltage from source at another voltage
[NASA-CASE-XER-11046] c09 N72-22203
Inductive-capacitive loops as load insensitive power converters
[NASA-CASE-ERC-10268] c09 N72-25252
Dc to ac to dc converter with transistor driven synchronous rectifiers
[NASA-CASE-GSC-11126-1] c09 N72-25253
Device for converting electromagnetic wave energy into electric power
[NASA-CASE-GSC-11394-1] c09 N73-32109
Heat operated cryogenic electrical generator
[NASA-CASE-NPO-15303-1] c20 N75-24837
Electric power generation system directory from laser power
[NASA-CASE-NPO-13308-1] c36 N75-30524
Smoke generator
[NASA-CASE-ARC-10905-1] c37 N77-13418
Electro-mechanical sine/cosine generator
[NASA-CASE-LAR-11389-1] c33 N77-26387
A linear magnetic motor/generator --- to generate electric energy using magnetic flux for spacecraft's power supply
[NASA-CASE-GSC-12518-1] c33 N80-19424
Wind wheel electric power generator
[NASA-CASE-MFS-23515-1] c44 N80-21828
Natural turbulence electrical power generator --- using wave action or random motion
[NASA-CASE-LAR-11551-1] c44 N80-29834
Electrical power generating system --- for windpowered generation
[NASA-CASE-MFS-24368-3] c33 N81-22280
- ELECTRIC IGNITION**
Method of making solid propellant rocket motor having reliable high altitude capabilities, long shelf life, and capable of firing with nozzle closure with foamed plastic permanent mandrel
[NASA-CASE-XLA-04126] c28 N71-26779
- ELECTRIC MOTOR VEHICLES**
Automotive absorption air conditioner utilizing solar and motor waste heat
[NASA-CASE-NFO-15183] c44 N80-29843
- ELECTRIC MOTORS**
Automatic control of voltage supply to direct current motor
[NASA-CASE-XMS-04215-1] c09 N69-39987
Electronic circuit system for controlling electric motor speed
[NASA-CASE-XMF-01129] c09 N70-38712
Using electron beam switching for brushless motor commutation
[NASA-CASE-IGS-01451] c09 N71-10677
Direct current electromotive system for regenerative braking of electric motor
[NASA-CASE-XMF-01096] c10 N71-16030
Describing angular position and velocity sensing apparatus
[NASA-CASE-IGS-05680] c14 N71-17585
Reversible current directing circuitry for reversible motor control
[NASA-CASE-XLA-09371] c10 N71-18724
Stepping motor control apparatus exciting windings in proper time sequence to cause motor to rotate in either direction
[NASA-CASE-GSC-10366-1] c10 N71-18772
Electromagnetic braking arrangement for controlling rotor rotation in electric motor
[NASA-CASE-XMF-06936] c15 N71-24695
Electric motor control system with pulse width modulation for providing automatic null seeking servo
[NASA-CASE-XMF-05195] c10 N71-24861
Velocity limiting safety system for motor driven research vehicle
[NASA-CASE-XLA-07473] c15 N71-24895
Design and development of electric motor with stationary field and armature windings which operates on direct current
[NASA-CASE-IGS-05290] c09 N71-25999
Circuits for controlling reversible dc motor
[NASA-CASE-XMF-07477] c09 N71-26092
Pulse duration control device for driving slow response time loads in selected sequence including switching and delay circuits and magnetic storage
[NASA-CASE-IGS-04224] c10 N71-26418
Feedback control for direct current motor to achieve constant speed under varying loads
[NASA-CASE-MFS-14610] c09 N71-28886
Optimal control system for automatic speed regulation of electric driven motor vehicle
[NASA-CASE-NPO-11210] c11 N72-20244
Direct current motor including stationary field windings and stationary armature winding
[NASA-CASE-IGS-07805] c15 N72-33476
Speed control system for dc motor equipped with brushless Hall effect device
[NASA-CASE-MFS-20207-1] c09 N73-32107
Three phase full wave dc motor decoder
[NASA-CASE-GSC-11824-1] c33 N77-26386
Rotary electric device
[NASA-CASE-GSC-12138-1] c33 N79-20314
A linear magnetic motor/generator --- to generate electric energy using magnetic flux for spacecraft's power supply
[NASA-CASE-GSC-12518-1] c33 N80-19424
Controller for computer control of brushless dc motors --- automobile engines
[NASA-CASE-NFO-13970-1] c33 N81-20352
- ELECTRIC NETWORKS**
Electric network for monitoring temperatures, detecting critical temperatures, and indicating critical time duration
[NASA-CASE-XMF-01097] c10 N71-16058
Development and characteristics of single or double pulse generator which produces constant width pulses in nanosecond region
[NASA-CASE-IGS-03427] c10 N71-23029
Switching series regulator with gating control network
[NASA-CASE-XMS-09352] c09 N71-23316
Broadband frequency discriminator with resistive captive inductive networks
[NASA-CASE-NFO-10096] c07 N71-24583
Electrical short locator --- identifying shorts occurring while an electrical system is being wired
[NASA-CASE-ARC-11116-1] c33 N79-31498

ELECTRIC POTENTIAL

Battery charging system with cell to cell voltage balance
[NASA-CASE-XGS-05432] c03 N71-19438

Conversion of positive dc voltage to positive dc voltage of lower amplitude
[NASA-CASE-XMF-14301] c09 N71-23188

Solid state integrator for converting variable width pulses into analog voltage
[NASA-CASE-XLA-03356] c10 N71-23315

Device for monitoring voltage by generating signal when voltages drop below predetermined value
[NASA-CASE-KSC-10020] c10 N71-27338

Plotter device for automatically drawing equipotential lines on sheet of resistance paper
[NASA-CASE-NPO-11134] c09 N72-21246

Pulsed excitation voltage circuit for strain gage bridge transducers
[NASA-CASE-FRC-10036] c09 N72-22200

Power converters for supplying direct current at one voltage from source at another voltage
[NASA-CASE-XER-11046] c09 N72-22203

Continuously variable, voltage-controlled phase shifter
[NASA-CASE-NPO-11129] c09 N72-33204

Photoelectron spectrometer with means for stabilizing sample surface potential
[NASA-CASE-NPO-13772-1] c35 N78-10429

Microcomputerized electric field meter diagnostic and calibration system
[NASA-CASE-KSC-11035-1] c35 N78-28411

Driver for solar cell I-V characteristic plots
[NASA-CASE-NPO-14096-1] c44 N80-18551

Microwave integrated circuit for Josephson voltage standards
[NASA-CASE-MFS-23845-1] c33 N81-17348

ELECTRIC POWER

Switching circuit with regeneratively connected transistors eliminating power consumption when not in use
[NASA-CASE-XNP-02654] c10 N70-42032

Variable water load for dissipating large amounts of electrical power during high voltage power supply tests
[NASA-CASE-XNP-05381] c09 N71-20842

Power factor control system for AC induction motors
[NASA-CASE-MFS-23280-1] c33 N78-10376

Shunt regulation electric power system
[NASA-CASE-GSC-10135] c33 N78-17296

Electrical power generating system --- for windpowered generation
[NASA-CASE-MFS-24368-3] c33 N81-22280

ELECTRIC POWER PLANTS

Ocean thermal plant
[NASA-CASE-KSC-11034-1] c44 N78-32542

ELECTRIC POWER SUPPLIES

Current dependent variable inductance for input filter chokes of ac or dc power supplies
[NASA-CASE-ERC-10139] c09 N72-17154

Development of thermal to electric power conversion system using solid state switches of electrical currents to load for Seebeck effect compensation
[NASA-CASE-NPO-11388] c03 N72-23408

Development of electrical circuit for suppressing oscillations across inductor operating in resonant mode
[NASA-CASE-ERC-10403-1] c10 N73-26228

Powerplexer for distribution of dc power levels to loads which require different voltages
[NASA-CASE-MS-12396-1] c03 N73-31588

Reliable electrical element heater using plural wire system and backup power sources
[NASA-CASE-MFS-21462-1] c33 N74-14935

Temperature compensated current source
[NASA-CASE-MS-11235] c33 N78-17294

ELECTRIC POWER TRANSMISSION

Power switch with transfluxor type magnetic core
[NASA-CASE-NPO-10242] c09 N71-24803

Circuit design for failure sensing and protecting low voltage electric generator and power transmission networks
[NASA-CASE-GSC-10114-1] c10 N71-27366

Powerplexer for distribution of dc power levels to loads which require different voltages
[NASA-CASE-MS-12396-1] c03 N73-31588

Microwave power transmission system wherein level of transmitted power is controlled by reflections from receiver
[NASA-CASE-MFS-21470-1] c44 N74-19870

Electrical rotary joint apparatus for large space structures
[NASA-CASE-MFS-23981-1] c33 N81-19394

ELECTRIC PROPULSION

Electric propulsion engine test chamber
[NASA-CASE-XLE-00252] c11 N70-34844

ELECTRIC PULSES

RC transistor circuit to indicate each pulse of pulse train and occurrence of nth pulse
[NASA-CASE-XMF-00906] c09 N70-41655

Design and development of variable pulse width multiplier
[NASA-CASE-XLA-02850] c09 N71-20447

Piezoelectric transducer for monitoring sound waves of physiological origin
[NASA-CASE-XMS-05365] c14 N71-22993

Development and characteristics of single or double pulse generator which produces constant width pulses in nanosecond region
[NASA-CASE-XGS-03427] c10 N71-23029

Solid state integrator for converting variable width pulses into analog voltage
[NASA-CASE-XLA-03356] c10 N71-23315

Development and characteristics of electric circuitry for detecting electrical pulses rise time and amplitude
[NASA-CASE-XMF-08804] c09 N71-24717

Circuit for measuring wide range of pulse rates by utilizing high capacity counter
[NASA-CASE-XNP-06234] c10 N71-27137

Precision full wave rectifier circuit for rectifying incoming electrical signals having positive or negative polarity with only positive output signals
[NASA-CASE-ARC-10101-1] c09 N71-33109

Phase modulating with odd and even finite power series of a modulating signal
[NASA-CASE-LAB-11607-1] c32 N77-14292

Telephone multiline signaling using common signal pair
[NASA-CASE-KSC-11023-1] c32 N79-23310

ELECTRIC RELAYS

Spark gap type protective circuit for fast sensing and removal of overvoltage conditions
[NASA-CASE-XAC-08981] c09 N69-39897

Time division multiplexer with magnetic latching relays
[NASA-CASE-XNP-00431] c09 N70-38998

Alarm system design for monitoring one or more relay circuits
[NASA-CASE-XMS-10984-1] c10 N71-19417

Time division relay synchronizer with master sync pulse for activating binary counter to produce signal identifying time slot for station
[NASA-CASE-GSC-10373-1] c07 N71-19773

Relay circuit breaker with magnetic latching to provide conductive and nonconductive paths for current devices
[NASA-CASE-HSC-11277] c09 N71-29008

Multi-cell battery protection system
[NASA-CASE-LEW-12039-1] c44 N78-14625

ELECTRIC ROCKET ENGINES

Electric rocket engine with electron bombardment ionization chamber
[NASA-CASE-XNP-04124] c28 N71-21822

ELECTRIC STIMULI

Tread drum for animals --- having an electrical shock station
[NASA-CASE-ARC-10917-1] c51 N78-27733

ELECTRIC SWITCHES

Thermionic diode switch for use in high temperature region to chop current from dc source
[NASA-CASE-NFO-10404] c03 N71-12255

Characteristics of hermetically sealed electric switch with flexible operating capability
[NASA-CASE-XNP-09808] c09 N71-12518

Electrical switching device comprising conductive liquid confined within square loop of deformable nonconductive tubing also used for leveling
[NASA-CASE-NPO-10037] c09 N71-19610

System for checking status of several double-throw switches by readout indications
[NASA-CASE-XLA-08799] c10 N71-27272

- Pulse generating circuit for operation at very high duty cycles and repetition rates
[NASA-CASE-XNP-00745] c10 N71-28960
- High dc switch for causing abrupt, cyclic, decreases of current to operate under zero or varying gravity conditions
[NASA-CASE-LEW-10155-1] c09 N71-29035
- Zero power telemetry actuated switch for biomedical equipment
[NASA-CASE-ARC-10105] c09 N72-17153
- Development of differential pressure control system using motion of mechanical diaphragms to operate electric switch
[NASA-CASE-MFS-14216] c14 N73-13418
- Pulse switching for high energy lasers
[NASA-CASE-NPO-14556-1] c36 N79-21336
- Fused switch
[NASA-CASE-XMS-01244-1] c33 N79-33393
- ELECTRIC TERMINALS**
- Electrical connector pin with wiping action to assure reliable contact
[NASA-CASE-XNP-04238] c09 N69-39734
- Patent data on terminal insert connector for flat electric cables
[NASA-CASE-XNP-00324] c09 N70-34596
- Tool attachment for spreading or moving away loose elements from terminal posts during winding of filamentary elements
[NASA-CASE-XNP-02107] c15 N71-10809
- Electrical spot terminal assembly for printed circuit boards
[NASA-CASE-NPO-10034] c15 N71-17685
- Device for resistance soldering electrical leads to solder cups of multiple terminal block
[NASA-CASE-GSC-10913] c15 N72-22491
- Development of electric connector and pin assembly with radio frequency absorbing sleeve to reduce radio frequency interference
[NASA-CASE-XLA-02609] c09 N72-25256
- Device for configuring multiple leads --- method for connecting electric leads to printed circuit board
[NASA-CASE-MFS-22133-1] c33 N74-26977
- ELECTRIC WELDING**
- Development of electric weeding torch with casing on one end to form inert gas shield
[NASA-CASE-XNP-02330] c15 N71-23798
- Electrical resistance butt welder for welding fine gauge tungsten/rhenium thermocouple wire
[NASA-CASE-LAR-10103-1] c15 N73-14468
- Process for welding compressor and turbine blades to rotors and discs of jet engines
[NASA-CASE-LEW-10533-1] c15 N73-28515
- ELECTRIC WIRE**
- Apparatus for forming wire grids for electric strain gages
[NASA-CASE-XLE-00023] c15 N70-33330
- Control of fusion welding through use of thermocouple wire
[NASA-CASE-MFS-06074] c15 N71-20393
- Ablation sensor for measuring char layer recession rate using electric wires
[NASA-CASE-XLA-01794] c33 N71-21586
- Device for resistance soldering electrical leads to solder cups of multiple terminal block
[NASA-CASE-GSC-10913] c15 N72-22491
- Lead attachment for high temperature operation of electronic devices
[NASA-CASE-ERC-10224] c09 N72-25261
- Means for accommodating large overstrain in lead wires --- by storing extra length of wire in stretchable loop
[NASA-CASE-LAR-10168-1] c33 N74-22665
- Device for configuring multiple leads --- method for connecting electric leads to printed circuit board
[NASA-CASE-MFS-22133-1] c33 N74-26977
- High current electrical lead --- for thermionic converters
[NASA-CASE-LEW-10950-1] c33 N74-27683
- Wire stripper
[NASA-CASE-FRC-10111-1] c37 N79-10419
- Method and apparatus for preparing multiconductor cable with flat conductors
[NASA-CASE-MFS-10946-1] c31 N79-21226
- Edge coating of flat wires
[NASA-CASE-XNP-05757-1] c31 N79-21227
- ELECTRICAL ENGINEERING**
- Counter-divider circuit for accuracy and reliability in binary circuits
[NASA-CASE-XNP-00421] c09 N70-34502
- Vibrating element electrometer producing high conversion gain by input current control of elements resonant frequency displacement amplitude
[NASA-CASE-XAC-02807] c09 N71-23021
- ELECTRICAL FAULTS**
- Overcurrent protecting circuit for push-pull transistor amplifiers
[NASA-CASE-MSC-12033-1] c09 N71-13531
- Circuit design for failure sensing and protecting low voltage electric generator and power transmission networks
[NASA-CASE-GSC-10114-1] c10 N71-27366
- Test method and equipment for identifying faulty cells or connections in solar cell assemblies
[NASA-CASE-NFO-10401] c03 N72-20033
- Shared memory for a fault-tolerant computer
[NASA-CASE-NPO-13139-1] c60 N76-21914
- ELECTRICAL IMPEDANCE**
- High voltage transistor circuit
[NASA-CASE-XNP-06937] c09 N71-19516
- Development of electrical system for measuring high impedance
[NASA-CASE-XMS-08589-1] c09 N71-20569
- Signaling summary alarm circuit with semiconductor switch for faulty contact indications
[NASA-CASE-XLE-03061-1] c10 N71-24798
- Signal conditioning circuit apparatus --- with constant input impedance
[NASA-CASE-ARC-10348-1] c33 N75-19518
- Readout electrode assembly for measuring biological impedance
[NASA-CASE-ARC-10816-1] c35 N76-24525
- Solid-state current transformer
[NASA-CASE-MFS-22560-1] c33 N77-14335
- ELECTRICAL INSULATION**
- Water cooled solenoid capable of producing magnetic field intensities up to 100 kilogauss
[NASA-CASE-XNP-01951] c09 N70-41929
- Method and apparatus for removing plastic insulation from wire using cryogenic equipment
[NASA-CASE-MFS-10340] c15 N71-17628
- Nonconductive tube as feed system for plasma thruster
[NASA-CASE-XLE-02902] c25 N71-21694
- Internal labyrinth and shield structure to improve electrical isolation of propellant feed source from ion thruster
[NASA-CASE-LEW-10210-1] c28 N71-26781
- Development of process for forming insulating layer between two electrical conductor or semiconductor materials
[NASA-CASE-LEW-10489-1] c15 N72-25447
- Bio-isolated dc operational amplifier --- for bioelectric measurements
[NASA-CASE-ARC-10596-1] c33 N74-21851
- Stored charge transistor
[NASA-CASE-NFO-11156-2] c33 N75-31331
- Method of making an insulation foil
[NASA-CASE-LEW-11484-1] c24 N75-33181
- Gas ion laser construction for electrically isolating the pressure gauge thereof
[NASA-CASE-MFS-22597] c36 N78-17366
- Wire stripper
[NASA-CASE-FRC-10111-1] c37 N79-10419
- ELECTRICAL MEASUREMENT**
- Capacitance measuring device for determining flare accuracy on tapered tubes
[NASA-CASE-XKS-03495] c14 N69-39785
- Bootstrap unloading circuits for sampling transducer voltage sources without drawing current
[NASA-CASE-XNP-09768] c09 N71-12516
- Micromicroampere current measuring circuit, with two subminiature thermionic diodes with filament cathodes
[NASA-CASE-XNP-00384] c09 N71-13530
- Low impedance apparatus for measuring electrostatic field intensity near space vehicles
[NASA-CASE-XLE-00820] c14 N71-16014
- Electric current measuring apparatus design including saturable core transformer and energy storage device to avoid magnetizing current errors from transformer output winding
[NASA-CASE-XGS-02439] c14 N71-19431

- High voltage divider system for attenuating high voltages to convenient levels suitable for introduction to measuring circuits
[NASA-CASE-XLE-02008] c09 N71-21583
- Ablation sensor for measuring char layer recession rate using electric wires
[NASA-CASE-XLA-01794] c33 N71-21586
- Current measurement by use of Hall effect generator
[NASA-CASE-XAC-01662] c14 N71-23037
- Connector internal force gage for measuring strength of electrical connection
[NASA-CASE-XNP-03918] c14 N71-23087
- Voltage range selection apparatus for sensing and applying voltages to electronic instruments without loading signal source
[NASA-CASE-XMS-06497] c14 N71-26244
- Lightning current measuring systems
[NASA-CASE-KSC-10807-1] c33 N75-26246
- Rapid activation and checkout device for batteries
[NASA-CASE-MFS-22749-1] c44 N76-14601
- Electrical conductivity cell and method for fabricating the same
[NASA-CASE-ARC-10810-1] c33 N76-19339
- Trielectrode capacitive pressure transducer
[NASA-CASE-ARC-10711-2] c33 N76-21390
- Readout electrode assembly for measuring biological impedance
[NASA-CASE-ARC-10816-1] c35 N76-24525
- Apparatus for measuring semiconductor device resistance
[NASA-CASE-NPO-14424-1] c33 N80-32650
- Pyroelectric detector arrays
[NASA-CASE-LAR-12363-1] c35 N81-12389
- ELECTRICAL PROPERTIES**
- Voltage drift compensation circuit for analog-to-digital converter
[NASA-CASE-XNP-04780] c08 N71-19687
- Development and characteristics of electronically resettable fuse with saturable core current sensing transformer having two outside legs and center leg
[NASA-CASE-IGS-11177] c09 N71-27001
- Development and characteristics of voltage regulator for connection in series with alternating current source and load using three leg, two-window transformer
[NASA-CASE-ERC-10113] c09 N71-27053
- Development of system with electrical properties which vary with changes in temperature for use with feedback loop in operational amplifier circuit
[NASA-CASE-MSC-13276-1] c14 N71-27058
- Electrically coupled individually encapsulated solar cell matrix
[NASA-CASE-NPO-11190] c03 N71-34044
- Storage battery comprising negative plates of a wedge shaped configuration --- for preventing shape change induced malfunctions
[NASA-CASE-NPO-11806-1] c44 N74-19693
- Thermocouple tape --- developed from thermoelectrically different metals
[NASA-CASE-LEW-11072-2] c35 N76-15434
- Modification of the electrical and optical properties of polymers --- ion irradiation to create texture
[NASA-CASE-LEW-13027-1] c27 N80-24437
- ELECTRICAL RESISTANCE**
- Development of electrical system for indicating optimum contact between electrode and metal surface to permit improved soldering operation
[NASA-CASE-KSC-10242] c15 N72-23497
- Radio frequency source resistance measuring instruments of varied design
[NASA-CASE-NPO-11291-1] c14 N73-30388
- Apparatus for measuring semiconductor device resistance
[NASA-CASE-NPO-14424-1] c33 N80-32650
- ELECTRICAL RESISTIVITY**
- Describing method for vapor deposition of gallium arsenide films to manganese substrates to provide semiconductor devices with low resistance substrates
[NASA-CASE-INP-01328] c26 N71-18064
- Simulating operation of thermopile vacuum gage tube at high and low pressures
[NASA-CASE-XLA-02758] c14 N71-18481
- Electrically conductive fluorocarbon polymers
[NASA-CASE-XLE-06774-2] c06 N72-25150
- Electrical conductivity cell and method for fabricating the same
[NASA-CASE-ARC-10810-1] c33 N76-19339
- Durable antistatic coating for polymethylmethacrylate
[NASA-CASE-NFO-13867-1] c27 N78-14164
- Remote lightning monitor system
[NASA-CASE-KSC-11031-1] c33 N79-11315
- Lightweight electrically-powered flexible thermal laminate --- made of metal and nonconductive yarns
[NASA-CASE-MSC-12662-1] c33 N79-12331
- Electrically conductive thermal control coatings
[NASA-CASE-GSC-12207-1] c24 N79-14156
- Electrically conductive palladium containing polyimide films
[NASA-CASE-LAR-12705-1] c33 N80-24549
- Electrical self-aligning connector
[NASA-CASE-MFS-25211-1] c33 N80-32651
- High voltage V-groove solar cell
[NASA-CASE-LEW-13401-1] c44 N81-16529
- ELECTRICITY**
- Thermionic converter for converting heat energy directly into electrical energy
[NASA-CASE-XLE-01903] c22 N71-23599
- ELECTRO-OPTICS**
- Electro-optical system with scan-in illuminator and scan-out photosensor for scanning variable transmittance objects
[NASA-CASE-NFO-11106] c14 N70-34697
- Electro-optical system for maintaining two-axis alignment during milling operations on large tank-sections
[NASA-CASE-XMF-00908] c14 N70-40238
- Automatic polarimeter capable of measuring transient birefringence changes in electro-optic materials
[NASA-CASE-XNP-08883] c23 N71-16101
- Design and development of light sensing device for controlling orientation of object relative to sun or other light source
[NASA-CASE-NFO-11201] c14 N72-27409
- Electro-optical stabilization of calibrated light source
[NASA-CASE-MSC-12293-1] c14 N72-27411
- Optical conversion method --- for spacecraft television
[NASA-CASE-MSC-12618-1] c74 N78-17865
- Noncontacting method for measuring angular deflection
[NASA-CASE-LAR-12178-1] c74 N80-21138
- ELECTROACOUSTIC TRANSDUCERS**
- Transducer for monitoring oxygen flow in respirator
[NASA-CASE-FRC-10012] c14 N72-17329
- Material suspension within an acoustically excited resonant chamber --- at near weightless conditions
[NASA-CASE-NPO-13263-1] c12 N75-24774
- CDS solid state phase insensitive ultrasonic transducer --- annealing cadmium sulfide crystals
[NASA-CASE-LAR-12304-1] c35 N80-20559
- ELECTROACOUSTIC WAVES**
- Phonocardiogram simulator producing electrical voltage waves to control amplitude and duration between simulated sounds
[NASA-CASE-XKS-10804] c05 N71-24606
- ELECTROCARDIOGRAPHY**
- Phonocardiogram simulator producing electrical voltage waves to control amplitude and duration between simulated sounds
[NASA-CASE-XKS-10804] c05 N71-24606
- Development of instantaneous reading tachometer for measuring electrocardiogram signal rate
[NASA-CASE-MFS-20418] c14 N73-24473
- Insulated electrocardiographic electrodes --- without paste electrolyte
[NASA-CASE-MSC-14339-1] c05 N75-24716
- Pocket ECG electrode
[NASA-CASE-ARC-11258-1] c52 N80-33081
- Subcutaneous electrode structure
[NASA-CASE-ARC-11117-1] c52 N81-14612
- ELECTROCATALYSTS**
- Electrocatalyst for oxygen reduction in low temperature alkaline fuel cell
[NASA-CASE-HQN-10537-1] c06 N72-10138
- Catalyst surfaces for the chromous/chromic redox couple

[NASA-CASE-LEW-13148-1] c33 N80-20487
Zirconium carbide as an electrocatalyst for the
chromous/chromic redox couple
[NASA-CASE-LEW-13246-1] c25 N81-26203

ELECTROCHEMICAL CELLS
Apparatus for measuring polymer membrane
expansion in electrochemical cells
[NASA-CASE-XGS-03865] c14 N69-21363
Preventing pressure buildup in electrochemical
cells by reacting palladium oxide with evolved
hydrogen
[NASA-CASE-XGS-01419] c03 N70-41664
Nonmagnetic hermetically sealed battery case
made of epoxy resin and woven glass tape for
use with electrochemical cells in spacecraft
[NASA-CASE-XGS-00886] c03 N71-11053
Epoxy resin sealing device for electrochemical
cells in high vacuum environments
[NASA-CASE-XGS-02630] c03 N71-22974
Sealed electrochemical cell with flexible casing
for varying electrolyte level in cell
[NASA-CASE-XGS-01513] c03 N71-23336
Elimination of two step voltage discharge
property of silver zinc batteries by using
divalent silver oxide capacity of cell to
charge anodes to monovalent silver state
[NASA-CASE-XGS-01674] c03 N71-29129
Flexible, frangible electrochemical cell and
package for operation in low temperature
environment
[NASA-CASE-XGS-10010] c03 N72-15986
Porous electrode for use in electrochemical cells
[NASA-CASE-GSC-11368-1] c09 N73-32108
Battery testing device --- for testing cells of
multiple-cell battery
[NASA-CASE-MPS-20761-1] c44 N74-27519
Electrical conductivity cell and method for
fabricating the same
[NASA-CASE-ARC-10810-1] c33 N76-19339
Multi-cell battery protection system
[NASA-CASE-LEW-12039-1] c44 N78-14625
Method and device for the detection of phenol
and related compounds --- in an
electrochemical cell
[NASA-CASE-LEW-12513-1] c25 N79-22235
Electrochemical cell for rebalancing REDOX flow
system
[NASA-CASE-LEW-13150-1] c44 N79-26474
Catalyst surfaces for the chromous/chromic redox
couple
[NASA-CASE-LEW-13148-1] c33 N80-20487

ELECTROCHEMICAL MACHINING
Apparatus for electrolytically tapered or
contoured cavities
[NASA-CASE-XNP-08835-1] c37 N80-14395

ELECTROCHEMICAL OXIDATION
Method and device for the detection of phenol
and related compounds --- in an
electrochemical cell
[NASA-CASE-LEW-12513-1] c25 N79-22235
Method for depositing an oxide coating ---
producing solar panels
[NASA-CASE-LEW-13131-1] c26 N81-24230

ELECTROCHEMISTRY
Electrochemically reversible silver-silver
chloride electrode for detecting bioelectric
potential differences generated by human
muscles and organs
[NASA-CASE-XMS-02872] c05 N69-21925
Electrochemical detection device --- for use in
microbiology
[NASA-CASE-LAR-11922-1] c25 N79-24073

ELECTRODE FILM BARRIERS
Formulated plastic separators for soluble
electrode cells --- rubber-ion transport
membranes
[NASA-CASE-LEW-12358-1] c44 N79-17313

ELECTRODELESS DISCHARGES
Lightning discharge identification system
[NASA-CASE-KSC-11099-1] c33 N79-25313

ELECTRODEPOSITION
Binding layer of semiconductor particles by
electrodeposition
[NASA-CASE-XNP-01959] c26 N71-23043
Electrodeposition method for producing
crystalline material from dense gaseous medium
[NASA-CASE-NPO-10440] c15 N72-21466
Electrophoretic sample insertion --- device for
uniformly distributing samples in flow path

[NASA-CASE-MPS-21395-1] c25 N74-26948
Multitarget sequential sputtering apparatus
[NASA-CASE-NPO-13345-1] c37 N75-19684
Method and device for the detection of phenol
and related compounds --- in an
electrochemical cell
[NASA-CASE-LEW-12513-1] c25 N79-22235
Improved refractory coatings and method of
producing the same
[NASA-CASE-LEW-13169-1] c26 N80-14232

ELECTRODES
Hollow spherical electrode for shielding
dielectric junction between high voltage
conductor and insulator
[NASA-CASE-XLB-03778] c09 N69-21542
Electrochemically reversible silver-silver
chloride electrode for detecting bioelectric
potential differences generated by human
muscles and organs
[NASA-CASE-XMS-02872] c05 N69-21925
Bonding method for improving contact between
lead telluride thermoelectric elements and
tungsten electrodes
[NASA-CASE-XGS-04554] c15 N69-39786
Ionization vacuum gage
[NASA-CASE-XNP-00646] c14 N70-35666
Accelerated and focus electrode design for ion engine
with improved efficiency
[NASA-CASE-XNP-02839] c28 N70-41922
Including didymium hydrate in nickel hydroxide
of positive electrode of storage batteries to
increase ampere hour capacity
[NASA-CASE-XGS-03505] c03 N71-10608
Apertured electrode focusing system for ion
sources with nonuniform plasma density
[NASA-CASE-XNP-03332] c09 N71-10618
Electromedical garment, applying
vectorcardiologic type electrodes to human
torsos for data recording during physical
activity
[NASA-CASE-XPR-10856] c05 N71-11189
Electrode attached to helmets for detecting low
level signals from skin of living creatures
[NASA-CASE-ARC-10043-1] c05 N71-11193
Characteristics of pressed disc electrode for
biological measurements
[NASA-CASE-XMS-04212-1] c05 N71-12346
Electrode connection for n-on-p silicon solar cell
[NASA-CASE-XLB-04787] c03 N71-20492
Arc electrode of graphite with tantalum ball tip
[NASA-CASE-XLB-04788] c09 N71-22987
Electrode sealing and insulation for fuel cells
containing caustic liquid electrolytes using
powdered plastic and metal
[NASA-CASE-XMS-01625] c15 N71-23022
Automatic recording McLeod gage with three
electrodes and solenoid valve connection
[NASA-CASE-XLB-03280] c14 N71-23093
Dry electrode design with wire sandwiched
between two flexible conductive discs for
monitoring physiological responses
[NASA-CASE-FRC-10029] c09 N71-24618
Development and characteristics of electrodes in
which poisoning by organic molecules is
prevented by ion selective electrolytic
deposition of hydrophilic protein colloid
[NASA-CASE-XMS-04213-1] c09 N71-26002
Adhesive spray process for attaching biomedical
skin electrodes
[NASA-CASE-IPR-07658-1] c05 N71-26293
Electrodes having array of small surfaces for
field ionization
[NASA-CASE-ERC-10013] c09 N71-26678
Manufacturing process for making perspiration
resistant-stress resistant biopotential
electrode
[NASA-CASE-MSC-90153-2] c05 N72-25120
Dry electrode manufacture, using silver powder
with cement
[NASA-CASE-FRC-10029-2] c05 N72-25121
Compressible electrolyte saturated sponge
electrode for biomedical applications
[NASA-CASE-MSC-13648] c05 N72-27103
Electrode with multiple columnar conductors for
limiting field emission current
[NASA-CASE-ERC-10015-2] c10 N72-27246
Coaxial, high density, hypervelocity plasma
generator and accelerator using electrodes
[NASA-CASE-MPS-20589] c25 N72-32686

- Characteristics of ion rocket engine with combination keeper electrode and electron baffle
[NASA-CASE-NPO-11880] c28 N73-24783
- Silicon carbide backward diode with coated lead attachment
[NASA-CASE-ERC-10224-2] c09 N73-27150
- Porous electrode for use in electrochemical cells
[NASA-CASE-GSC-11368-1] c09 N73-32108
- High powered arc electrodes --- producing solar simulator radiation
[NASA-CASE-LEW-11162-1] c33 N74-12513
- Method of making porous conductive supports for electrodes --- by electroforming and stacking nickel foils
[NASA-CASE-GSC-11367-1] c44 N74-19692
- Insulated electrocardiographic electrodes --- without paste electrolyte
[NASA-CASE-MS-C-14339-1] c05 N75-24716
- Readout electrode assembly for measuring biological impedance
[NASA-CASE-ARC-10816-1] c35 N76-24525
- Gels as battery separators for soluble electrode cells
[NASA-CASE-LEW-12364-1] c44 N77-22606
- Snap-in compressible biomedical electrode
[NASA-CASE-MS-C-14623-1] c52 N77-28717
- Cesium thermionic converters having improved electrodes
[NASA-CASE-LEW-12038-3] c44 N78-25555
- Apparatus for electrolytically tapered or contoured cavities
[NASA-CASE-XNP-08835-1] c37 N80-14395
- Toroidal cell and battery --- storage battery for high amp-hour load applications
[NASA-CASE-LEW-12918-1] c44 N81-24521
- Additive for zinc electrodes
[NASA-CASE-LEW-13286-1] c44 N81-27597
- Catalyst surfaces for the chromous/chromic redox couple
[NASA-CASE-LEW-13148-2] c44 N81-29524
- ELECTRODIALYSIS**
Electrophoresis device
[NASA-CASE-MFS-25426-1] c25 N81-29179
- ELECTROFORMING**
Method of electroforming a rocket chamber
[NASA-CASE-LEW-11118-1] c20 N74-32919
- ELECTROHYDRAULIC FORMING**
Electric discharge apparatus for electrohydraulic explosive forming
[NASA-CASE-XMF-00375] c15 N70-34249
- ELECTROHYDRODYNAMICS**
Control valve for switching main stream of fluid from one stable position to another by means of electrohydrodynamic forces
[NASA-CASE-NPO-10416] c12 N71-27332
- ELECTROKINETICS**
Zeta potential flowmeter for measuring very slow to very high flows
[NASA-CASE-XNP-06509] c14 N71-23226
- ELECTROLYSIS**
Water electrolysis rocket engine with self-regulating stoichiometric fuel mixing regulator
[NASA-CASE-XGS-08729] c28 N71-14044
- Operation method for combined electrolysis device and fuel cell using molten salt to produce power by thermoelectric regeneration mechanism
[NASA-CASE-XLE-01645] c03 N71-20904
- Polymeric electrolytic hygrometer
[NASA-CASE-NPO-13948-1] c35 N78-25391
- ELECTROLYTES**
Apparatus for measuring polymer membrane expansion in electrochemical cells
[NASA-CASE-XGS-03865] c14 N69-21363
- Electrolytically regenerative hydrogen-oxygen fuel cells
[NASA-CASE-XLE-04526] c03 N71-11052
- Sealed electrochemical cell with flexible casing for varying electrolyte level in cell
[NASA-CASE-XGS-01513] c03 N71-23336
- Compressible electrolyte saturated sponge electrode for biomedical applications
[NASA-CASE-MS-C-13648] c05 N72-27103
- An improved solid electrolyte cell
[NASA-CASE-NPO-15269-1] c33 N81-16385
- ELECTROLYTIC CELLS**
Heat activated cell with aluminum anode
[NASA-CASE-LEW-11359-2] c03 N72-20034
- Actuator operated by electrolytic drive gas generator and evacuator
[NASA-CASE-NPO-11369] c15 N73-13467
- Electrolytic cell structure
[NASA-CASE-LAR-11042-1] c33 N75-27252
- Reconstituted asbestos matrix --- for use in fuel or electrolysis cells
[NASA-CASE-MS-C-12568-1] c24 N76-14204
- Catalyst surfaces for the chromous/chromic redox couple
[NASA-CASE-LEW-13148-1] c33 N80-20487
- An improved solid electrolyte cell
[NASA-CASE-NFO-15269-1] c33 N81-16385
- Cell and method for electrolysis of water and anode
[NASA-CASE-MS-C-16394-1] c28 N81-24280
- Toroidal cell and battery --- storage battery for high amp-hour load applications
[NASA-CASE-LEW-12918-1] c44 N81-24521
- ELECTROMAGNETIC ABSORPTION**
Optical imaging system for increasing light absorption efficiency of imaging detector
[NASA-CASE-ARC-10194-1] c23 N73-20741
- Method and apparatus for background signal reduction in opto-acoustic absorption measurement
[NASA-CASE-NPO-13683-1] c35 N77-14411
- Electromagnetic radiation energy arrangement --- coatings for solar energy absorption and infrared reflection
[NASA-CASE-WOO-00428-1] c32 N79-19186
- Electromagnetic power absorber
[NASA-CASE-NPO-13830-1] c32 N80-14281
- ELECTROMAGNETIC FIELDS**
Tumbling motion system for object demagnetization
[NASA-CASE-XGS-02437] c15 N69-21472
- Device for high vacuum film deposition with electromagnetic ion steering
[NASA-CASE-NPO-10331] c09 N71-26701
- Metal detection system with electromagnetic transmitter with single coil and receiver with single coil
[NASA-CASE-ARC-10265-1] c10 N72-28240
- Low power electromagnetic flowmeter system producing zero output signal for zero flow
[NASA-CASE-ARC-10362-1] c14 N73-32326
- Electromagnetic flow rate meter --- for liquid metals
[NASA-CASE-LEW-10981-1] c35 N74-21018
- Microcomputerized electric field meter diagnostic and calibration system
[NASA-CASE-KSC-11035-1] c35 N78-28411
- ELECTROMAGNETIC HAMMERS**
Method and apparatus for shaping and joining large diameter metal tubes using magnetomotive forces
[NASA-CASE-XMP-05114] c15 N71-17650
- Portable magnetomotive hammer for metal working
[NASA-CASE-XMP-03793] c15 N71-24833
- ELECTROMAGNETIC INTERFERENCE**
Sealed housing for protecting electronic equipment against electromagnetic interference
[NASA-CASE-MS-C-12168-1] c09 N71-18600
- Method of treating the surface of a glass member
[NASA-CASE-GSC-12110-1] c27 N77-32308
- ELECTROMAGNETIC MEASUREMENT**
Apparatus for measuring backscatter and transmission characteristics of sample segment of large spherical passive satellites
[NASA-CASE-XGS-02608] c07 N70-41678
- Microcomputerized electric field meter diagnostic and calibration system
[NASA-CASE-KSC-11035-1] c35 N78-28411
- ELECTROMAGNETIC NOISE**
Development of idler feedback system to reduce electronic noise problem in two parametric amplifiers
[NASA-CASE-LAR-10253-1] c09 N72-25258
- Audio equipment for removing impulse noise from audio signals
[NASA-CASE-NPO-11631] c10 N73-12244
- Filtering device --- removing electromagnetic noise from voice communication signals
[NASA-CASE-MFS-22729-1] c32 N76-21366
- ELECTROMAGNETIC PROPULSION**
Hypervelocity gun --- using both electric and chemical energy for projectile propulsion
[NASA-CASE-XLE-03186-1] c09 N79-21084

ELECTROMAGNETIC PUMPS

Multiducted electromagnetic pump for conductive liquids
[NASA-CASE-NPO-10755] c15 N71-27084

ELECTROMAGNETIC RADIATION

Inflatable radar reflector unit - lightweight, highly reflective to electromagnetic radiation, and adaptable for erection and deployment with minimum effort and time
[NASA-CASE-XMS-00893] c07 N70-40063
Development of electromagnetic wave transmission line circulator and application to parametric amplifier circuits
[NASA-CASE-XNP-02140] c09 N71-23097
Left and right hand circular electromagnetic polarization excitation by phase shifter and hybrid networks
[NASA-CASE-GSC-10021-1] c09 N71-24595
Development of method for suppressing excitation of electromagnetic surface waves on dielectric converter antenna
[NASA-CASE-XLA-10772] c07 N71-28980
Characteristics of microwave antenna with conical reflectors to generate plane wave front
[NASA-CASE-NPO-11661] c07 N73-14130
Method and apparatus for measuring electromagnetic radiation
[NASA-CASE-LEW-11159-1] c14 N73-28488

ELECTROMAGNETIC SHIELDING

Shielded flat conductor cable fabricated by electroless and electrolytic plating
[NASA-CASE-MFS-13687] c09 N71-28691
Wire stripper
[NASA-CASE-FRC-10111-1] c37 N79-10419
Shielded conductor cable system
[NASA-CASE-MSC-12745-1] c33 N81-27397

ELECTROMAGNETIC WAVE FILTERS

Design and characteristics of laser camera system with diffusion filter of small particles with average diameter larger than wavelength of laser light
[NASA-CASE-NPO-10417] c16 N71-33410

ELECTROMAGNETIC WAVE TRANSMISSION

Apparatus for measuring backscatter and transmission characteristics of sample segment of large spherical passive satellites
[NASA-CASE-XGS-02608] c07 N70-41678
Gyrotion transmitting tube
[NASA-CASE-LEW-13429-1] c33 N81-16384

ELECTROMAGNETISM

Electromagnetic braking arrangement for controlling rotor rotation in electric motor
[NASA-CASE-XNP-06936] c15 N71-24695
Linear magnetic bearing
[NASA-CASE-GSC-12517-1] c33 N81-22279

ELECTROMAGNETS

Oscillatory electromagnetic mirror drive system for horizon scanners
[NASA-CASE-XLA-03724] c14 N69-27461
Water cooled solenoid capable of producing magnetic field intensities up to 100 kilogauss
[NASA-CASE-XNP-01951] c09 N70-41929
Magnetic element position sensing device, using misaligned electromagnets
[NASA-CASE-XGS-07514] c23 N71-16099
Electroexplosive safe-arm initiator using electric driven electromagnetic coils and magnets to align charge
[NASA-CASE-LAR-10372] c09 N71-18599
Magnetic bearing --- for supplying magnetic fluxes
[NASA-CASE-GSC-11079-1] c37 N75-18574
Linear magnetic bearings --- active magnetic suspension of armatures
[NASA-CASE-GSC-12582-1] c37 N81-16469

ELECTROMECHANICAL DEVICES

Electromechanical actuator and its use in rocket thrust control valve
[NASA-CASE-XNP-05975] c15 N69-23185
Power controlled bimetallic electromechanical actuator for accurate, timely, and reliable response to remote control signal
[NASA-CASE-XNP-09776] c09 N69-39929
Electro-mechanical circuit for converting floating intelligence signal to common electrically grounded intelligence recorder
[NASA-CASE-XAC-00086] c09 N70-33182
Describing device for velocity control of electromechanical drive mechanism of scanning mirror of interferometer

[NASA-CASE-XGS-03532] c14 N71-17627
Mechanical actuator wherein linear motion changes to rotational motion
[NASA-CASE-XGS-04548] c15 N71-24045
Solid state force measuring electromechanical transducers made of piezoresistive materials
[NASA-CASE-ERC-10088] c26 N71-25490
Electromechanical control actuator system using double differential screws
[NASA-CASE-ERC-10022] c15 N71-26635
Miniature electromechanical junction transducer operating on piezoelectric effect and utilizing epoxy for stress coupling component
[NASA-CASE-ERC-10087] c14 N71-27334
Service life of electromechanical device for generating sine/cosine functions
[NASA-CASE-LAR-10503-1] c09 N72-21248
Electromechanical actuator for producing mechanical force and/or motion in response to electrical signals
[NASA-CASE-NPO-11738-1] c09 N73-30185
Electro-mechanical sine/cosine generator
[NASA-CASE-LAR-11389-1] c33 N77-26387
Rotary electric device
[NASA-CASE-GSC-12138-1] c33 N79-20314
Coal-shale interface detection system
[NASA-CASE-MFS-23720-2] c43 N80-14423
Magnetic field control --- electromechanical torquing devices
[NASA-CASE-MFS-23828-1] c33 N80-17359
Coal-shale interface detector
[NASA-CASE-MFS-23720-1] c43 N80-23711

ELECTROMETERS

Vibrating element electrometer producing high conversion gain by input current control of elements resonant frequency displacement amplitude
[NASA-CASE-XAC-02807] c09 N71-23021
Pyroelectric detector arrays
[NASA-CASE-LAR-12363-1] c35 N81-12369

ELECTROMIGRATION

Electromigration process for the purification of molten silicon during crystal growth
[NASA-CASE-NPO-14831-1] c76 N81-19944

ELECTROMOTIVE FORCES

Heat activated emf cells with aluminum anode
[NASA-CASE-LEW-11359] c03 N71-28579
Flexible formulated plastic separators for alkaline batteries
[NASA-CASE-LEW-12363-4] c44 N80-18555

ELECTRON ATTACHMENT

High resolution threshold photoelectron spectroscopy by electron attachment
[NASA-CASE-NPO-14078-1] c72 N80-14877

ELECTRON BEAM WELDING

Portable electron beam welding chamber
[NASA-CASE-LEW-11531] c15 N71-14932
Development of device to prevent high voltage arcing in electron beam welding
[NASA-CASE-XNP-08522] c15 N71-19486

ELECTRON BEAMS

Using electron beam switching for brushless motor commutation
[NASA-CASE-XGS-01451] c09 N71-10677
Electron beam scanning system for improved image definition and reduced power requirements for video signal transmission
[NASA-CASE-ERC-10552] c09 N71-12539
Electron beam deflection devices for measuring electric fields
[NASA-CASE-XNP-10289] c14 N71-23699
Apparatus to determine electric field strength by measuring deflection of electron beam impinging on target
[NASA-CASE-XNP-06617] c09 N71-24843
Characteristics of infrared photodetectors manufactured from semiconductor material irradiated by electron beam
[NASA-CASE-LAR-10728-1] c14 N73-12445
Electron beam controller --- using magnetic field to refocus spent electron beam in microwave oscillator tube
[NASA-CASE-LEW-11617-1] c33 N74-10195
Image tube --- deriving electron beam replica of image
[NASA-CASE-GSC-11602-1] c33 N74-21850
Very high intensity light source using a cathode ray tube --- electron beams
[NASA-CASE-XNP-01296] c33 N75-27250

Coupled cavity traveling wave tube with velocity tapering
[NASA-CASE-LBW-12296-1] c33 N80-19425

A low energy electron magnetometer
[NASA-CASE-LAR-12706-1] c35 N81-19428

ELECTRON BOMBARDMENT

Improved cathode containing barium carbonate block and heated tungsten screen for electron bombardment ion thruster
[NASA-CASE-XLE-07087] c06 N69-39889

Device and method for particle bombardment of specimens in electron microscope and measurement of beam intensities
[NASA-CASE-XGS-01725] c14 N69-39582

Electric rocket engine with electron bombardment ionization chamber
[NASA-CASE-INP-04124] c28 N71-21822

Electronic cathodes for use in electron bombardment ion thrusters
[NASA-CASE-XLE-04501] c09 N71-23190

Single grid accelerator system for electron bombardment type ion thruster
[NASA-CASE-XLE-10453-2] c28 N73-27699

Containerless high temperature calorimeter apparatus
[NASA-CASE-MFS-23923-1] c35 N81-19426

ELECTRON CAPTURE

Multistage depressed collector for dual node operation --- for travelling wave tubes
[NASA-CASE-LBW-13282-1] c33 N79-32463

ELECTRON DISTRIBUTION

Measurement of plasma temperature and density using radiation absorption
[NASA-CASE-ARC-10598-1] c75 N74-30156

ELECTRON EMISSION

Vacuum thermionic converter with short-circuited triodes and increased electron transmission and conversion efficiency
[NASA-CASE-XLE-01015] c03 N69-39898

ELECTRON FLUX DENSITY

Device and method for particle bombardment of specimens in electron microscope and measurement of beam intensities
[NASA-CASE-XGS-01725] c14 N69-39982

ELECTRON IRRADIATION

Electrostatic ion engines using high velocity electrons to ionize propellant
[NASA-CASE-XLE-00376] c28 N70-37245

ELECTRON MICROSCOPES

Device and method for particle bombardment of specimens in electron microscope and measurement of beam intensities
[NASA-CASE-XGS-01725] c14 N69-39582

Method of forming aperture plate for electron microscope
[NASA-CASE-ARC-10448-2] c74 N75-12732

Electron microscope aperture system
[NASA-CASE-ARC-10448-3] c35 N77-14408

ELECTRON PHOTON CASCADES

Resistive anode image converter
[NASA-CASE-HQN-10876-1] c33 N76-27473

ELECTRON PLASMA

Apparatus for producing highly conductive, high temperature electron plasma with homogeneous temperature and pressure distribution
[NASA-CASE-XLA-00147] c25 N70-34661

ELECTRON SOURCES

Electron microscope aperture system
[NASA-CASE-ARC-10448-3] c35 N77-14408

ELECTRON TRANSFER

Method for treating metal surfaces to prevent secondary electron transmission
[NASA-CASE-INP-09469] c24 N71-25555

ELECTRON TRANSITIONS

Diatonic infrared gasdynamic laser --- for producing different wavelengths
[NASA-CASE-ARC-10370-1] c36 N75-31426

ELECTRON TUBES

Direct radiation cooling of linear beam collector tubes
[NASA-CASE-INP-09227] c15 N69-24319

Refractory filament series circuitry for radiant heater
[NASA-CASE-XLE-00387] c33 N70-34812

Gyrotion transmitting tube
[NASA-CASE-LBW-13429-1] c33 N81-16384

Ion sputter textured graphite --- applications to electron tube devices
[NASA-CASE-LBW-12919-1] c24 N81-27198

ELECTRON TUNNELING

Doped Josephson tunneling junction for use in a sensitive IR detector
[NASA-CASE-NPO-13348-1] c33 N75-31332

ELECTRONIC CONTROL

Electronic and mechanical scanning control system for monopulse tracking antenna
[NASA-CASE-XGS-05582] c07 N69-27460

Electronic circuit system for controlling electric motor speed
[NASA-CASE-INP-01129] c09 N70-38712

Scanning signal phase and amplitude electronic control device with hybrid T waveguide junction
[NASA-CASE-NFO-10302] c10 N71-26142

Ion beam deflector system for electronic thrust vector control for ion propulsion yaw, pitch, and roll forces
[NASA-CASE-LBW-10689-1] c28 N71-26173

Electronic detection system for peak acceleration limits in vibrational testing of spacecraft components
[NASA-CASE-NPO-10556] c14 N71-27185

Control and information system for digital telemetry data using analog converter to digitize sensed parameter values
[NASA-CASE-NFO-11016] c08 N72-31226

ELECTRONIC EQUIPMENT

Electronic and mechanical scanning control system for monopulse tracking antenna
[NASA-CASE-XGS-05582] c07 N69-27460

Development of pulse-activated polarographic hydrogen detector
[NASA-CASE-INP-06531] c14 N71-17575

Development of stable electronic amplifier adaptable for monolithic and thin film construction
[NASA-CASE-XGS-02812] c09 N71-19466

Development and characteristics of oscillating static inverter
[NASA-CASE-XGS-05289] c09 N71-19470

Development of electromagnetic wave transmission line circulator and application to parametric amplifier circuits
[NASA-CASE-INP-02140] c09 N71-23097

Development of optimum pre-detection diversity combining receiving system adapted for use with amplitude modulation, phase modulation, and frequency modulation systems
[NASA-CASE-XGS-00740] c07 N71-23098

Electronic cathodes for use in electron bombardment ion thrusters
[NASA-CASE-XLE-04501] c09 N71-23190

Method and apparatus for adjusting thermal conductance in electronic components for space use
[NASA-CASE-INP-05524] c33 N71-24876

Development and characteristics of solid state acoustic variable time delay line using direct current voltage and radio frequency pulses
[NASA-CASE-ERC-10032] c10 N71-25900

Voltage range selection apparatus for sensing and applying voltages to electronic instruments without loading signal source
[NASA-CASE-XMS-06497] c14 N71-26244

Digital sensor for counting fringes produced by interferometers with improved sensitivity and one photomultiplier tube to eliminate alignment problem
[NASA-CASE-LAR-10204] c14 N71-27215

Device for rapid adjustment and maintenance of temperature in electronic components
[NASA-CASE-INP-02792] c14 N71-28958

Apparatus with summing network for compression of analog data by decreasing slope threshold sampling
[NASA-CASE-NPO-10769] c08 N72-11171

Readily assembled universal environment housing for electronic equipment
[NASA-CASE-KSC-10031] c15 N72-22486

Lead attachment for high temperature operation of electronic devices
[NASA-CASE-ERC-10224] c09 N72-25261

Development of method and apparatus for detecting surface ions on silicon diodes and transistors
[NASA-CASE-ERC-10325] c15 N72-25457

Development and characteristics of data decoder to process convolution encoded information
[NASA-CASE-NFC-11371] c08 N73-12177

- Characteristics of digital data processor using pulse from clock source to derive binary singles to show state of various indicators in processor
[NASA-CASE-GSC-10975-1] c08 N73-13187
- Thermochromic compositions for detecting heat levels in electronic circuits and devices
[NASA-CASE-NPO-10764-1] c14 N73-14428
- Development of phase control coupling for use with phased array antenna
[NASA-CASE-BRC-10285] c10 N73-16206
- Device for locating electrically nonlinear objects and determining distance to object by FM signal transmission
[NASA-CASE-KSC-10108] c14 N73-25461
- Electronic strain level counter on in-flight aircraft
[NASA-CASE-LAR-10756-1] c32 N73-26510
- Automatic vehicle location system
[NASA-CASE-NPO-11850-1] c32 N74-12512
- Automatic focus control for facsimile cameras
[NASA-CASE-LAR-11213-1] c35 N75-15014
- Electronic analog divider
[NASA-CASE-LBN-11881-1] c33 N77-17354
- Multistage depressed collector for dual node operation --- for travelling wave tubes
[NASA-CASE-LBN-13282-1] c33 N79-32463
- ELECTRONIC EQUIPMENT TESTS**
- Apparatus for automatically testing analog to digital converters for open and short circuits
[NASA-CASE-XLA-06713] c14 N71-28591
- Signal conditioner test set
[NASA-CASE-KSC-10750-1] c35 N75-12270
- Decommutator patchboard verifier
[NASA-CASE-KSC-11065-1] c33 N81-26359
- ELECTRONIC FILTERS**
- Self-tuning electronic filter for maintaining constant bandwidth and center frequency gain
[NASA-CASE-ARC-10264-1] c09 N73-20231
- Capacitance multiplier and filter synthesizing network
[NASA-CASE-NPO-11948-1] c33 N74-32712
- Notch filter
[NASA-CASE-MFS-23303-1] c32 N77-18307
- ELECTRONIC MODULES**
- Thermal conductive, electrically insulated cleavable adhesive connection between electronic module and heat sink
[NASA-CASE-XMS-02087] c09 N70-41717
- Fabrication methods for matrices of solar cell submodules
[NASA-CASE-XNP-05821] c03 N71-11056
- Development and characteristics of cooling system to maintain temperature of rack mounted electronic modules
[NASA-CASE-MSC-12389] c33 N71-29052
- Tool for use in lifting pin supported objects
[NASA-CASE-NPO-13157-1] c37 N74-32918
- Phase substitution of spare converter for a failed one of parallel phase staggered converters
[NASA-CASE-NPO-13812-1] c33 N77-30365
- Method of making encapsulated solar cell modules
[NASA-CASE-LBN-12185-1] c44 N78-25528
- Electronically scanned pressure sensor module with in situ calibration capability
[NASA-CASE-LAR-12230-1] c35 N79-14347
- Module failure isolation circuit for paralleled inverters --- preventing system failure during power conditioning for spacecraft applications
[NASA-CASE-NPO-14000-1] c33 N79-24254
- Circuit for automatic load sharing in parallel converter modules
[NASA-CASE-NPO-14056-1] c33 N79-24257
- Method and apparatus for fabricating improved solar cell modules
[NASA-CASE-NPO-14416-1] c44 N81-14389
- Redundant operation of counter modules
[NASA-CASE-NPO-14162-1] c60 N81-15706
- ELECTRONIC PACKAGING**
- Electrical feedthrough connection for printed circuit boards
[NASA-CASE-XNP-01483] c14 N69-27431
- Capacitor fabrication by solidifying mixture of ferromagnetic metal particles, nonferromagnetic particles, and dielectric material
[NASA-CASE-LBN-10364-1] c09 N71-13522
- Method of evaluating moisture barrier properties of materials used in electronics encapsulation
[NASA-CASE-NPO-10051] c18 N71-24934
- Electrical connections for thin film hybrid microcircuits
[NASA-CASE-XMS-02182] c10 N71-28783
- Flexible, frangible electrochemical cell and package for operation in low temperature environment
[NASA-CASE-XGS-10010] c03 N72-15986
- Development and characteristics of hermetically sealed coaxial package for containing microwave semiconductor components
[NASA-CASE-GSC-10791-1] c15 N73-14469
- Techniques for packaging and mounting printed circuit boards
[NASA-CASE-MFS-21919-1] c10 N73-25243
- Integrated circuit package with lead structure and method of preparing the same
[NASA-CASE-MFS-21374-1] c33 N74-12951
- Tool for use in lifting pin supported objects
[NASA-CASE-NPO-13157-1] c37 N74-32918
- Chassis unit insert tightening-extract device
[NASA-CASE-XMS-01077-1] c37 N79-33467
- Computer circuit card puller
[NASA-CASE-PRC-11042-1] c37 N80-20589
- ELECTRONIC RECORDING SYSTEMS**
- Electronic recording system for spatial mass distribution of liquid rocket propellant droplets or vapors ejected from high velocity nozzles
[NASA-CASE-NPO-10185] c10 N71-26339
- A self-correcting electronically scanned pressure sensor
[NASA-CASE-LAR-12686-1] c09 N81-27121
- ELECTRONIC TRANSDUCERS**
- Fiber optic transducers for monitoring and analysis of vibration in aerospace vehicles and onboard equipment
[NASA-CASE-XMF-02433] c14 N71-10616
- Transducer circuit design with single coaxial cable for input and output connections including incorporation into miniaturized catheter transducer
[NASA-CASE-ARC-10132-1] c09 N71-24597
- Circuit design for failure sensing and protecting low voltage electric generator and power transmission networks
[NASA-CASE-GSC-10114-1] c10 N71-27366
- Electromagnetic transducer recording head having a laminated core section and tapered gap
[NASA-CASE-NPO-10711-1] c35 N77-21392
- Distributed-switch Dicke radiometers
[NASA-CASE-GSC-12219-1] c35 N80-18359
- ELECTROPHORESIS**
- Electrophoretic sample insertion --- device for uniformly distributing samples in flow path
[NASA-CASE-MFS-21395-1] c25 N74-26948
- Apparatus for conducting flow electrophoresis in the substantial absence of gravity
[NASA-CASE-MFS-21394-1] c34 N74-27744
- Automatic multiple-sample applicator and electrophoresis apparatus
[NASA-CASE-ARC-10991-1] c25 N78-14104
- Portable electrophoresis apparatus using minimum electrolyte
[NASA-CASE-NPO-13274-1] c25 N79-10163
- Microelectrophoretic apparatus and process
[NASA-CASE-ARC-11121-1] c25 N79-14169
- Electrophoretic fractional elution apparatus employing a rotational seal fraction collector
[NASA-CASE-MFS-23284-1] c37 N80-14397
- Method for separating biological cells --- suspended in aqueous polymer systems
[NASA-CASE-MFS-23883-1] c51 N80-16715
- Electrophoresis device
[NASA-CASE-MFS-25426-1] c25 N81-29179
- ELECTROPHOTOMETERS**
- Method and photodetector device for locating abnormal voids in low density materials
[NASA-CASE-MFS-20044] c14 N71-28993
- ELECTROPHYSIOLOGY**
- Dry electrode design with wire sandwiched between two flexible conductive discs for monitoring physiological responses
[NASA-CASE-PRC-10029] c09 N71-24618
- ELECTROPLATING**
- Method of plating copper on aluminum to permit conventional soldering of structural aluminum

- bodies
[NASA-CASE-XLA-08966-1] c17 N71-25903
Shielded flat conductor cable fabricated by
electroless and electrolytic plating
[NASA-CASE-MFS-13687] c09 N71-28691
Technique and equipment for sputtering using
apertured electrode and pulsed substrate bias
[NASA-CASE-LEW-10920-1] c17 N73-24569
Method for depositing an oxide coating ---
producing solar panels
[NASA-CASE-LEW-13131-1] c26 N81-24230
Method of forming oxide coatings
[NASA-CASE-LEW-13132-1] c44 N81-27616
Catalyst surfaces for the chromous/chromic redox
couple
[NASA-CASE-LEW-13148-2] c44 N81-29524
- ELECTROSTATIC CHARGE**
Charged particle analyzer with periodically
varying voltage applied across electrostatic
deflection members
[NASA-CASE-XAC-05506-1] c24 N71-16095
Electrostatic measurement system --- for
contact-electrifying a dielectric
[NASA-CASE-MFS-22129-1] c33 N75-18477
Use of glow discharge in fluidized beds
[NASA-CASE-ARC-11245-1] c33 N80-11326
- ELECTROSTATIC ENGINES**
Colloidal particle generator for electrostatic
engine for propelling space vehicles
[NASA-CASE-XLE-00817] c28 N70-33265
Encapsulated heater forming hollow body for
cathode used in ion thruster
[NASA-CASE-LEW-10814-1] c28 N70-35422
Electrostatic ion engines using high velocity
electrons to ionize propellant
[NASA-CASE-XLE-00376] c28 N70-37245
Electron bombardment ion rocket engine with
improved propellant introduction system
[NASA-CASE-XLE-02066] c28 N71-15661
- ELECTROSTATIC GENERATORS**
Electrostatic modulator for communicating
through plasma sheath formed around spacecraft
during reentry
[NASA-CASE-XLA-01400] c07 N70-41331
- ELECTROSTATIC PRECIPITATORS**
Fine particulate capture device
[NASA-CASE-LEW-11583-1] c35 N79-17192
- ELECTROSTATIC PROBES**
Low impedance apparatus for measuring
electrostatic field intensity near space
vehicles
[NASA-CASE-XLE-00820] c14 N71-16014
- ELECTROSTATIC PROPULSION**
High voltage insulators for direct current in
acceleration system of electrostatic thruster
[NASA-CASE-XLE-01902] c28 N71-10574
Electrostatic microthruster propulsion system with
annular slit colloid thruster
[NASA-CASE-GSC-10709-1] c28 N71-25213
- ELECTROSTATIC SHIELDING**
Ion beam thruster shield
[NASA-CASE-LEW-12082-1] c20 N77-10148
Shielded conductor cable system
[NASA-CASE-MSC-12745-1] c33 N81-27397
- ELECTROSTATICS**
Controllable high voltage source having fast
settling time
[NASA-CASE-GSC-11844-1] c33 N75-19522
- ELECTROTHERMAL ENGINES**
Electrothermal rocket engine using resistance
heated heat exchanger
[NASA-CASE-XLE-00267] c28 N70-33356
High resistance cross flow heat exchangers for
electrothermal rocket engines
[NASA-CASE-XLE-01783] c28 N70-34175
- ELEVATION**
Tracking mount for laser telescope employed in
tracking large rockets and space vehicles to
give information regarding azimuth and elevation
[NASA-CASE-MFS-14017] c14 N71-26627
Automatic braking device for rapidly
transferring humans or materials from elevated
location
[NASA-CASE-XKS-07814] c15 N71-27067
- ELEVATORS (LIFTS)**
Centrifuge mounted motion simulator with
elevator mechanism
[NASA-CASE-XAC-00399] c11 N70-34615
- Guide member for stabilizing cable of open shaft
elevator
[NASA-CASE-KSC-10513] c15 N72-25453
- ELEVONS**
Supersonic or hypersonic vehicle control system
comprising elevons with hinge line sweep and
free of adverse aerodynamic cross coupling
[NASA-CASE-XLA-08967] c02 N71-27088
- ELLIPSES**
Ellipsograph for describing and cutting ellipses
with minimal axial dimensions
[NASA-CASE-XLA-03102] c14 N71-21079
- ELLIPSONETERS**
Remote sensing of vegetation and soil using
microwave ellipsometry
[NASA-CASE-GSC-11976-1] c43 N78-10529
- ELONGATION**
Strain gage measurement of elongation due to
thermally and mechanically induced stresses
[NASA-CASE-XGS-04478] c14 N71-24233
Amplifying ribbon extensometer
[NASA-CASE-LAR-11825-1] c35 N77-22449
Moving body velocity arresting line ---
elongating steel cable
[NASA-CASE-LAR-12372-1] c37 N80-18399
- ELUTION**
Amino acid analysis
[NASA-CASE-NPO-12130-1] c25 N75-14844
Electrophoretic fractional elution apparatus
employing a rotational seal fraction collector
[NASA-CASE-MFS-23284-1] c37 N80-14397
- EMERGENCIES**
Silent alarm system for multiple room facility or
school
[NASA-CASE-NPO-11307-1] c10 N73-30205
Emergency space-suit helmet
[NASA-CASE-MSC-10954-1] c54 N78-18761
- EMERGENCY BREATHING TECHNIQUES**
Pulmonary resuscitation method and apparatus
with adjustable pressure regulator
[NASA-CASE-XMS-01115] c05 N70-39922
- EMERGENCY LIFE SUSTAINING SYSTEMS**
Development and characteristics of inflatable
structure to provide escape from orbit for
spacecrews under emergency conditions
[NASA-CASE-XMS-06162] c31 N71-28851
Three transceiver lunar emergency system to
relay voice communication of astronaut
[NASA-CASE-MFS-21042] c07 N72-25171
Emergency descent device
[NASA-CASE-MFS-23074-1] c54 N77-21844
- EMISSION SPECTRA**
Emission spectroscopy method for contamination
monitoring of inert gas metal arc welding
[NASA-CASE-XMF-02039] c15 N71-15871
- EMITTANCE**
High thermal emittance black surface coatings
and process for applying to metal and metal
alloy surfaces used in radiative cooling of
spacecraft
[NASA-CASE-XLA-06199] c15 N71-24875
- EMITTERS**
Inverted geometry transistor for use with
monolithic integrated circuit
[NASA-CASE-ARC-10330-1] c09 N73-32112
- EMULSIONS**
Apparatus for obtaining isotropic irradiation on
film emulsion from parallel radiation source
[NASA-CASE-MFS-20095] c24 N72-11595
- ENAMELS**
Refractory porcelain enamel passive control
coating for high temperature alloys
[NASA-CASE-MFS-22324-1] c27 N75-27160
- ENCAPSULATING**
Development of bacteriostatic conformal coating
and methods of application
[NASA-CASE-GSC-10007] c18 N71-16046
Flexible, repairable, pottable composition for
encapsulating electric connectors
[NASA-CASE-XGS-05180] c18 N71-25881
Test chambers with orifice and helium mass
spectrometer for detecting leak rate of
encapsulated semiconductor devices
[NASA-CASE-ERC-10150] c14 N71-28992
Electrically coupled individually encapsulated
solar cell matrix
[NASA-CASE-NPO-11190] c03 N71-34044
Method of making encapsulated solar cell modules
[NASA-CASE-LEW-12185-1] c44 N78-25528

ENCLOSURES

Method and apparatus for bowing of instrument panels to improve radio frequency shielded enclosure
[NASA-CASE-XMF-09422] c07 N71-19436
Totally confined explosive welding
[NASA-CASE-LAR-10941-2] c37 N79-13364

ENDOSCOPES

Borescope with adjustable hinged telescoping optical system
[NASA-CASE-MFS-15162] c14 N72-32452
Apparatus for endoscopic examination --- analysis of the propulsion system configuration and transmitter
[NASA-CASE-NPO-14092-1] c52 N80-16725

ENDOTHERMIC REACTIONS

Sensor device with switches for measuring surface recession of charring and noncharring ablators
[NASA-CASE-XLA-01781] c14 N69-39975

ENEMY PERSONNEL

Development of electronic detection system for remotely determining number and movement of enemy personnel
[NASA-CASE-ARC-10097-2] c07 N73-25160

ENERGY ABSORPTION

Non-reusable kinetic energy absorber for application in soft landing of space vehicles
[NASA-CASE-XLE-00810] c15 N70-34861
Low onset rate energy absorber in form of strut assembly for crew couch of Apollo command module
[NASA-CASE-MSC-12279-1] c15 N70-35679
Air brake device for absorbing and measuring power from rotating shafts
[NASA-CASE-XLE-00720] c14 N70-40201
Design and development of double acting shock absorber for spacecraft docking operations
[NASA-CASE-XMS-03722] c15 N71-21530
Nonreusable energy absorbing device comprising ring member with plurality of recesses, cutting members, and guide member mounted in each recess
[NASA-CASE-XMF-10040] c15 N71-22677
Suspended mass oscillation damper based on impact energy absorption for damping wind induced oscillations of tall stacks, antennas, and umbilical towers
[NASA-CASE-LAR-10193-1] c15 N71-27146
Energy absorption device in high precision gear train for protection against damage to components caused by stop loads
[NASA-CASE-XNP-01848] c15 N71-28959
Shock absorber for use as protective barrier in impact energy absorbing system
[NASA-CASE-NPO-10671] c15 N72-20443
High energy absorption docking system design for docking large spacecraft
[NASA-CASE-MFS-20863] c31 N73-26876
Metal shearing energy absorber
[NASA-CASE-HQN-10638-1] c15 N73-30460

ENERGY CONSERVATION

Remote platform power conserving system
[NASA-CASE-GSC-11182-1] c15 N75-13007

ENERGY CONVERSION

Thermoelectric power conversion by liquid metal flowing through magnetic field
[NASA-CASE-XNP-00644] c03 N70-36803
Concentrator device for controlling direction of solar energy onto energy converters
[NASA-CASE-XLE-01716] c09 N70-40234
Device for converting electromagnetic wave energy into electric power
[NASA-CASE-GSC-11394-1] c09 N73-32109
Electric power generation system directory from laser power
[NASA-CASE-NPO-13308-1] c36 N75-30524
Mechanical thermal motor
[NASA-CASE-MFS-23062-1] c37 N77-12402
Low to high temperature energy conversion system
[NASA-CASE-NPO-13510-1] c44 N77-32581
Solar energy collection system
[NASA-CASE-NPO-13810-1] c44 N77-32582
Microwave power converter
[NASA-CASE-NPO-14068-1] c44 N78-19609
Amplified wind turbine apparatus
[NASA-CASE-MFS-23830-1] c44 N80-21831
VACUUM THERMIONIC CONVERTER WITH SHORT-CIRCUITED TRIODES AND INCREASED ELECTRON TRANSMISSION

and conversion efficiency
[NASA-CASE-XLE-01015] c03 N69-39898
Direct conversion of thermal energy into electrical energy using crossed electric and magnetic fields
[NASA-CASE-XLE-00212] c03 N70-34134
Increasing power conversion efficiency of electronic amplifiers by power supply switching
[NASA-CASE-XMS-00945] c09 N71-10798
Energy storage apparatus
[NASA-CASE-GSC-12030-1] c44 N78-24608
Solar cell system having alternating current output
[NASA-CASE-LEW-12806-1] c44 N78-25553
Method of construction of a multi-cell solar array
[NASA-CASE-MFS-23540-1] c44 N79-26475
Self-reconfiguring solar cell system
[NASA-CASE-LEW-12586-1] c44 N80-14472
Improving the efficiency of silicon solar cells containing chromium
[NASA-CASE-NPO-15179-1] c44 N80-32850
ENERGY DISSIPATION
Energy dissipating shock absorbing system for land payload recovery or vehicle braking
[NASA-CASE-XLA-00754] c15 N70-34850
Wingtip vortex dissipator for aircraft
[NASA-CASE-LAR-11645-1] c02 N77-10001
Motion restraining device
[NASA-CASE-NPO-13619-1] c37 N78-16369
ENERGY DISTRIBUTION
Method and apparatus for measurement of trap density and energy distribution in dielectric films
[NASA-CASE-NPO-13443-1] c76 N76-20994
ENERGY LEVELS
High resolution threshold photoelectron spectroscopy by electron attachment
[NASA-CASE-NFO-14078-1] c72 N80-14877
A low energy electron magnetometer
[NASA-CASE-LAR-12706-1] c35 N81-19428
ENERGY POLICY
Solar energy power system
[NASA-CASE-MFS-21628-2] c44 N76-23675
Thermal energy storage system --- operating on superheating of liquids
[NASA-CASE-MFS-23167-1] c44 N76-31667
Mount for continuously orienting a collector dish in a system adapted to perform both diurnal and seasonal solar tracking
[NASA-CASE-MFS-23267-1] c35 N77-20401
Lightweight reflector assembly
[NASA-CASE-NPO-13707-1] c74 N77-28933
Solar photolysis of water
[NASA-CASE-NFO-13675-1] c44 N77-32580
Selective coating for solar panels --- using black chrome and black nickel
[NASA-CASE-LEW-12159-1] c44 N78-19599
Microwave power converter
[NASA-CASE-NFO-14068-1] c44 N78-19609
Solar pond
[NASA-CASE-NFO-13581-2] c44 N78-31525
Non-tracking solar energy collector system
[NASA-CASE-NFO-13813-1] c44 N78-31526
Coal desulfurization process
[NASA-CASE-NFO-13937-1] c44 N78-31527
Primary reflector for solar energy collection systems
[NASA-CASE-NPO-13579-4] c44 N79-14529
Primary reflector for solar energy collection systems and method of making same
[NASA-CASE-NPO-13579-3] c44 N79-24432
Solar energy collection system
[NASA-CASE-NPO-13579-2] c44 N79-24433
Combined solar collector and energy storage system
[NASA-CASE-LAR-12205-1] c44 N80-20810
Wind wheel electric power generator
[NASA-CASE-MFS-23515-1] c44 N80-21828
Amplified wind turbine apparatus
[NASA-CASE-MFS-23830-1] c44 N80-21831
Solar-heated fluidized bed gasification system
[NASA-CASE-NPO-15071-1] c44 N80-24747
Induced junction solar cell and method of fabrication
[NASA-CASE-NFO-13786-1] c44 N80-29835
Solar power satellite system
[NASA-CASE-HQN-10949-1] c44 N81-16530
Solar energy receiver for a Stirling engine
[NASA-CASE-NFO-14619-1] c44 N81-17518

- Copper doped polycrystalline silicon solar cell
[NASA-CASE-NPO-14670-1] c44 N81-19558
- ENERGY SOURCES**
- Pulse generator for synchronizing or resetting electronic signals without requiring separate external source
[NASA-CASE-XGS-03632] c09 N71-23311
- Controllable high voltage source having fast settling time
[NASA-CASE-GSC-11844-1] c33 N75-19522
- Wingtip vortex turbine
[NASA-CASE-LAR-12544-1] c67 N81-27096
- ENERGY STORAGE**
- Switching mechanism with energy stored in coil spring
[NASA-CASE-XGS-00473] c03 N70-38713
- Stored charge transistor
[NASA-CASE-NPO-11156-2] c33 N75-31331
- Mechanical energy storage device for hip disarticulation
[NASA-CASE-ARC-10916-1] c52 N78-10686
- Energy storage apparatus
[NASA-CASE-GSC-12030-1] c44 N78-24608
- Rotatable mass for a flywheel
[NASA-CASE-MFS-23051-1] c37 N79-10422
- Combined solar collector and energy storage system
[NASA-CASE-LAR-12205-1] c44 N80-20810
- Atomic hydrogen storage method and apparatus
[NASA-CASE-LEW-12081-3] c28 N81-14103
- ENERGY TECHNOLOGY**
- Solar energy collection system
[NASA-CASE-NPO-13810-1] c44 N77-32582
- Method for producing solar energy panels by automation
[NASA-CASE-LEW-12541-1] c44 N78-25529
- Hydrogen-fueled engine
[NASA-CASE-NPO-13763-1] c44 N78-33526
- Surfactant-assisted liquefaction of particulate carbonaceous substances
[NASA-CASE-NPO-13904-1] c25 N79-11152
- Back wall solar cell
[NASA-CASE-LEW-12236-2] c44 N79-14528
- Solar cell module assembly jig
[NASA-CASE-XGS-00829-1] c44 N79-19447
- Solar energy collection system
[NASA-CASE-NPO-13579-2] c44 N79-24433
- Solar concentrator
[NASA-CASE-MFS-23727-1] c44 N80-14473
- Method for forming a solar array strip
[NASA-CASE-NPO-13652-3] c44 N80-14474
- ENERGY TRANSFER**
- Solar energy absorber
[NASA-CASE-MFS-22743-1] c44 N76-22657
- ENGINE ANALYZERS**
- Indicated mean-effective pressure instrument
[NASA-CASE-LEW-12661-1] c35 N79-14345
- ENGINE CONTROL**
- Direct current electromotive system for regenerative braking of electric motor
[NASA-CASE-XMP-01096] c10 N71-16030
- Integrated lift/drag controller for aircraft
[NASA-CASE-ARC-10456-1] c05 N75-12930
- Power control for hot gas engines
[NASA-CASE-NPO-14220-1] c37 N81-14318
- Apparatus for sensor failure detection and correction in a gas turbine engine control system
[NASA-CASE-LEW-12907-2] c07 N81-19115
- ENGINE COOLANTS**
- Apparatus for cooling and injecting hypergolic propellants into combustion chamber of small rocket engine
[NASA-CASE-XLE-00303] c15 N70-36535
- Injector manifold assembly for bipropellant rocket engines providing for fuel propellant to serve as coolant
[NASA-CASE-XMP-00148] c28 N70-38710
- ENGINE DESIGN**
- Design and development of gas turbine combustion unit with nozzle guide vanes for introducing diluent air into combustion gases
[NASA-CASE-XLE-103477-1] c28 N71-20330
- Construction and method of arranging plurality of ion engines to form cluster thereby increasing efficiency and control by decreasing heat radiated to space
[NASA-CASE-XNP-02923] c28 N71-23081
- Space vehicle system
[NASA-CASE-MSC-12561-1] c18 N76-17185
- Noise suppressor for turbo fan jet engines
[NASA-CASE-ARC-10812-1] c07 N76-18131
- Solid propellant motor
[NASA-CASE-NPO-11458A] c20 N78-32179
- Hydrogen-fueled engine
[NASA-CASE-NPO-13763-1] c44 N78-33526
- Solar engine --- Flat plate type
[NASA-CASE-LAR-12148-1] c44 N79-29608
- Method and apparatus for rapid thrust increases in a turbofan engine
[NASA-CASE-LEW-12971-1] c07 N80-18039
- Free-piston regenerative hot gas hydraulic engine
[NASA-CASE-LEW-12274-1] c37 N80-31790
- Phase-angle controller for Stirling engines
[NASA-CASE-NPO-14388-1] c37 N81-17432
- Hot gas engine with dual cranks shafts
[NASA-CASE-NPO-14221-1] c37 N81-25370
- ENGINE FAILURE**
- System for monitoring presence of neutrals in streams of ions - ion engine control
[NASA-CASE-XNP-02592] c24 N71-20518
- ENGINE INLETS**
- Variably positioned guide vanes for aerodynamic choking
[NASA-CASE-LAR-10642-1] c07 N74-31270
- The engine air intake system
[NASA-CASE-ARC-10761-1] c07 N77-18154
- Self stabilizing sonic inlet
[NASA-CASE-LEW-11890-1] c05 N79-24976
- ENGINE MONITORING INSTRUMENTS**
- System for monitoring presence of neutrals in streams of ions - ion engine control
[NASA-CASE-XNP-02592] c24 N71-20518
- ENGINE NOISE**
- Variably positioned guide vanes for aerodynamic choking
[NASA-CASE-LAR-10642-1] c07 N74-31270
- Variable thrust nozzle for quiet turbofan engine and method of operating same
[NASA-CASE-LEW-12317-1] c07 N78-17055
- Multiple pure tone elimination strut assembly
[NASA-CASE-FRC-11062-1] c07 N80-32393
- ENGINE PARTS**
- Gas turbine engine with convertible accessories
[NASA-CASE-LEW-12390-1] c07 N78-17056
- Gas path seal
[NASA-CASE-NPO-12131-3] c37 N80-18400
- Heat pipes to reduce engine exhaust emissions
[NASA-CASE-LEW-12590-1] c25 N81-19245
- ENGINE STARTERS**
- Portable device for use in starting air-start-units for aircraft and having cable lead testing capability
[NASA-CASE-FRC-10113-1] c33 N80-26599
- ENGINE TESTS**
- Electric propulsion engine test chamber
[NASA-CASE-XLE-00252] c11 N70-34844
- ENGINEERING DRAWINGS**
- High-temperature, high-pressure spherical segment valve
[NASA-CASE-XAC-00074] c15 N70-34817
- Graphic illustration of lifting body design
[NASA-CASE-FRC-10063] c01 N71-12217
- Specifications and drawings for semipassive optical communication system
[NASA-CASE-XLA-01090] c07 N71-12389
- Method of making molded electric connector for use with flat conductor cables
[NASA-CASE-XMP-03498] c15 N71-15986
- ENTHALPY**
- Measuring conductive heat flow and thermal conductivity of laminar gas stream in cylindrical plug to simulate atmospheric reentry
[NASA-CASE-XLE-00266] c14 N70-34156
- ENTRAINMENT**
- Water separator
[NASA-CASE-XMS-01295-1] c37 N79-21345
- ENUMERATION**
- Apparatus and process for microbial detection and enumeration
[NASA-CASE-LAR-12709-1] c51 N81-29727
- ENVIRONMENT SIMULATION**
- Method and apparatus for applying compressional forces to skeletal structure of subject to simulate force during ambulatory conditions
[NASA-CASE-ARC-10100-1] c05 N71-24738
- Gravity environment simulation by locomotion and restraint aid for studying manual operation performance of astronauts at zero gravity

[NASA-CASE-ABC-10153] c05 N71-28619
ENVIRONMENTAL SIMULATORS
 Space environment simulator for testing spacecraft components under aerospace conditions [NASA-CASE-NPO-10141] c11 N71-24564
 Environmental fog/rain visual display system for aircraft simulators [NASA-CASE-ABC-11158-1] c09 N79-33220
ENVIRONMENTAL CONTROL
 Portable environmental control and life support system for astronaut in and out of spacecraft [NASA-CASE-XMS-09632-1] c05 N71-11203
 Portable apparatus producing high velocity annular air column surrounding low velocity, filtered, superclean air central core for industrial clean room environmental control [NASA-CASE-XMP-03212] c15 N71-22721
 Development and characteristics of thermal sensitive panel for controlling ratio of solar absorptivity to surface emissivity for space vehicle temperature control [NASA-CASE-XLA-07728] c33 N71-22890
 Dual solid cryogenics for spacecraft refrigeration insuring low temperature cooling for extended periods [NASA-CASE-GSC-10188-1] c23 N71-24725
 Vibration control of flexible bodies in steady accelerating environment [NASA-CASE-LAR-10106-1] c15 N71-27169
 Test chamber for determining decomposition and autoignition of materials used in spacecraft under controlled environmental conditions [NASA-CASE-KSC-10198] c11 N71-28629
 Readily assembled universal environment housing for electronic equipment [NASA-CASE-KSC-10031] c15 N72-22486
 Environmentally controlled suit for working in sterile chamber [NASA-CASE-LAR-10076-1] c05 N73-20137
 Dual stage check valve for cryogenic supply systems used in space flight environmental control system [NASA-CASE-MSC-13587-1] c15 N73-30459
 Spacecraft with artificial gravity and earthlike atmosphere [NASA-CASE-LEW-11101-1] c31 N73-32750
ENVIRONMENTAL ENGINEERING
 Thermal control wall panel with application to spacecraft cabins [NASA-CASE-XLA-01243] c33 N71-22792
ENVIRONMENTAL MONITORING
 System for real-time crustal deformation monitoring [NASA-CASE-NPO-14124-1] c46 N80-14603
ENVIRONMENTAL TESTS
 Multisample test chamber for exposing materials to X rays, temperature change, and gaseous conditions and determination of material effects [NASA-CASE-XMS-02930] c11 N71-23042
 Space suit using nonflexible material with low leakage and providing protection against thermal extremes, physical punctures, and radiation with high mobility articulation [NASA-CASE-XAC-07043] c05 N71-23161
 Flammability test chamber for testing materials in certain predetermined environments [NASA-CASE-KSC-10126] c11 N71-24585
 Multiaxes vibration device for making vibration tests along orthogonal axes of test specimen [NASA-CASE-MPS-20242] c14 N73-19421
 Fixture for environmental exposure of structural materials under compression [NASA-CASE-LAR-12602-1] c35 N81-19429
ENVIRONMENTS
 Hermetically sealed elbow actuator for use in severe environments [NASA-CASE-MPS-14710] c09 N72-22195
ENZYMATIC ACTIVITY
 Use of enzyme hexokinase and glucose to reduce inherent light levels of ATP in luciferase compositions [NASA-CASE-IGS-05533] c04 N69-27487
 Enzymatic luminescent bioassay method for determining bacterial levels in urine [NASA-CASE-GSC-11092-2] c04 N73-27052
ENZYMES
 Protein sterilization of firefly luciferase without denaturation [NASA-CASE-GSC-10225-1] c06 N73-27086

EPICYCLOIDS
 Sequencing device utilizing planetary gear set [NASA-CASE-MSC-19514-1] c37 N79-20377
EPITAXY
 Method for the preparation of inorganic single crystal and polycrystalline electronic materials [NASA-CASE-XLE-02545-1] c76 N79-21910
EPOXY COMPOUNDS
 Synthesis of siloxane containing epoxy polymers with low dielectric properties [NASA-CASE-MPS-13994-1] c06 N71-11240
 Synthesis of siloxane containing epoxide and diamine polymers [NASA-CASE-MPS-13994-2] c06 N72-25148
 Fire protection covering for small diameter missiles [NASA-CASE-ABC-11104-1] c15 N79-26100
EPOXY MATRIX COMPOSITE MATERIALS
 Fiberglass/epoxy composite automotive door structure including a glass-reinforced intrusion strip [NASA-CASE-NPO-15057-1] c24 N81-19230
EPOXY RESINS
 Nonmagnetic hermetically sealed battery case made of epoxy resin and woven glass tape for use with electrochemical cells in spacecraft [NASA-CASE-IGS-00886] c03 N71-11053
 Epoxy resin sealing device for electrochemical cells in high vacuum environments [NASA-CASE-IGS-02630] c03 N71-22974
 Cold metal hydroforming techniques using epoxy molds for counteracting creep or stretch [NASA-CASE-XLE-05641-1] c15 N71-26346
 Miniature electromechanical junction transducer operating on piezoelectric effect and utilizing epoxy for stress coupling component [NASA-CASE-BEC-10087] c14 N71-27334
 Infusible polymer production from reaction of polyfunctional epoxy resins with polyfunctional aziridine compounds [NASA-CASE-NPO-10701] c06 N71-28620
 Method of repairing discontinuity in fiberglass structures [NASA-CASE-LAR-10416-1] c24 N74-30001
 Transparent fire resistant polymeric structures [NASA-CASE-ABC-10813-1] c27 N76-16230
 Curing agent for polyepoxides and epoxy resins and composites cured therewith --- preventing carbon fiber release [NASA-CASE-LEW-13226-1] c27 N81-17260
 Universal connectors for joining stringers [NASA-CASE-LAR-12744-1] c37 N81-31551
EQUATIONS OF MOTION
 Kinesimetric method and apparatus [NASA-CASE-MSC-18929-1] c54 N81-15699
EQUIPMENT
 Bimetallic fluid displacement apparatus --- for stirring and heating stored gases and liquids [NASA-CASE-ABC-10441-1] c35 N74-15126
 Apparatus for supplying conditioned air at a substantially constant temperature and humidity [NASA-CASE-GSC-12191-1] c31 N80-32583
EQUIPMENT SPECIFICATIONS
 Differential pressure cell insensitive to changes in ambient temperature and extreme overload [NASA-CASE-XAC-00042] c14 N70-34816
 High-temperature, high-pressure spherical segment valve [NASA-CASE-XAC-00074] c15 N70-34817
 Remote-reading torque meter for use where high horsepowers are transmitted at high rotative speeds [NASA-CASE-XLE-00503] c14 N70-34818
 Magnetically centered liquid column float [NASA-CASE-XAC-00030] c14 N70-34820
 Electric propulsion engine test chamber [NASA-CASE-XLE-00252] c11 N70-34844
 Channel-type shell construction for rocket engines and related configurations [NASA-CASE-XLE-00144] c28 N70-34860
 Non-reusable kinetic energy absorber for application in soft landing of space vehicles [NASA-CASE-XLE-00810] c15 N70-34861
 Slit regulated gas journal bearing [NASA-CASE-XMP-00476] c15 N70-38620
 Specifications and drawings for semipassive optical communication system [NASA-CASE-XLA-01090] c07 N71-12389

- Stretcher with rigid head and neck support with capability of supporting immobilized person in vertical position for removal from vehicle hatch to exterior also useful as splint stretcher
[NASA-CASE-XNP-06589] c05 N71-23159
- Development of vortex fluid amplifier for throttling rocket exhaust
[NASA-CASE-LRW-16374-1] c28 N73-13773
- Simplified technique and device for producing industrial grade synthetic diamonds
[NASA-CASE-MFS-20698-2] c15 N73-19457
- Anti-buckling fatigue test assembly --- for subjecting metal specimen to tensile and compressive loads at constant temperature
[NASA-CASE-LAR-10426-1] c09 N74-19528
- Apparatus for conducting flow electrophoresis in the substantial absence of gravity
[NASA-CASE-MFS-21394-1] c34 N74-27744
- Thermocouple tape --- developed from thermoelectrically different metals
[NASA-CASE-LRW-11072-2] c35 N76-15434
- Field effect transistor and method of construction thereof
[NASA-CASE-MFS-23312-1] c33 N78-27326
- EQUIPOTENTIALS**
- Equipotential space suits utilizing mechanical aids to minimize astronaut energy at bending joints
[NASA-CASE-LAR-10007-1] c05 N71-11195
- Instrument for measuring potentials on two dimensional electric field plot
[NASA-CASE-XLA-08493] c10 N71-19421
- ERGOMETERS**
- Development of restraint system for securing personnel to ergometer while exercising under weightless conditions
[NASA-CASE-MFS-21046-1] c14 N73-27377
- Versatile ergometer with work load control
[NASA-CASE-MFS-21109-1] c05 N73-27941
- Tilting table for testing human body in variety of positions while exercising on ergometer or other biomedical devices
[NASA-CASE-MFS-21010-1] c05 N73-30078
- Pneumatic foot pedal operated fluidic exercising device
[NASA-CASE-MSC-11561-1] c05 N73-32014
- Ergometer calibrator --- for any ergometer utilizing rotating shaft
[NASA-CASE-MFS-21045-1] c35 N75-15932
- EROSION**
- Thermal shock and erosion resistant tantalum carbide ceramic material
[NASA-CASE-LAR-11902-1] c27 N78-17206
- ERROR ANALYSIS**
- Development of computer program for estimating reliability of self-repair and fault-tolerant systems with respect to selected system and mission parameters
[NASA-CASE-NPO-13086-1] c15 N73-12495
- Bit error rate measurement above and below bit rate tracking threshold
[NASA-CASE-MSC-12743-1] c32 N79-10263
- ERROR CORRECTING DEVICES**
- Error correction circuitry for binary signal channels
[NASA-CASE-XNP-03263] c09 N71-18843
- Multiplexed communication system design including automatic correction of transmission errors introduced by frequency spectrum shifts
[NASA-CASE-XNP-01306] c07 N71-20814
- Description of error correcting methods for use with digital data computers and apparatus for encoding and decoding digital data
[NASA-CASE-XNP-02748] c08 N71-22749
- Failure detection and control means for improved drift performance of a gimbaled platform system
[NASA-CASE-MFS-23551-1] c04 N76-26175
- Guide for a typewriter
[NASA-CASE-MFS-15218-1] c37 N77-19457
- A self-correcting electronically scanned pressure sensor
[NASA-CASE-LAR-12686-1] c09 N81-27121
- ERROR DETECTION CODES**
- Self testing and repairing computer comprising control and diagnostic unit and rollback points for error correction
[NASA-CASE-NPO-10567] c08 N71-24633
- ERROR SIGNALS**
- Error correction circuitry for binary signal channels
[NASA-CASE-XNP-03263] c09 N71-18843
- Feedback controller for sampling error signals within single control formulation time interval
[NASA-CASE-GSC-10554-1] c08 N71-29033
- Bit error rate measurement above and below bit rate tracking threshold
[NASA-CASE-MSC-12743-1] c32 N79-10263
- ERRORS**
- Analog to digital converter using offset voltage to eliminate errors
[NASA-CASE-MSC-13110-1] c08 N72-22163
- ESCAPE CAPSULES**
- Aerial capsule emergency separation device using jettisonable towers
[NASA-CASE-XLA-00115] c03 N70-33343
- Emergency escape cabin system for launch towers
[NASA-CASE-IKS-02342] c05 N71-11199
- Spacecraft design with single point aerodynamic and hydrodynamic stability for emergency transport of men from space station to splashdown
[NASA-CASE-MSC-13281] c31 N72-18859
- ESCAPE SYSTEMS**
- Design and specifications of emergency escape system for spacecraft structures
[NASA-CASE-MSC-12086-1] c05 N71-12345
- Automatic braking device for rapidly transferring humans or materials from elevated location
[NASA-CASE-IKS-07814] c15 N71-27067
- Explosively activated egress area
[NASA-CASE-LAR-12624-1] c03 N81-29107
- ESTERS**
- Fluorinated esters of polycarboxylic acid and lubricating compositions for use at extreme temperature
[NASA-CASE-MFS-21040-1] c06 N73-30098
- ETCHING**
- Reusable masking boot for chemical machining operations
[NASA-CASE-XNP-02092] c15 N70-42033
- Development of method for etching copper
[NASA-CASE-XGS-06306] c17 N71-16044
- Composition and process for improving definition of resin masks used in chemical etching
[NASA-CASE-XGS-04993] c14 N71-17574
- Etching aluminum alloys with aqueous solution containing sulfuric acid, hydrofluoric acid, and an alkali metal dischromate for adhesive bonding
[NASA-CASE-XNP-02303] c17 N71-23828
- Selective plating of etched circuits without removing previous plating
[NASA-CASE-XGS-03120] c15 N71-24047
- Nickel plating onto etched aluminum castings
[NASA-CASE-XNP-04148] c17 N71-24830
- Scanning nozzle plating system --- for etching or plating metals on substrates without masking
[NASA-CASE-NPO-11758-1] c31 N74-23065
- Liquid immersion apparatus for minute articles
[NASA-CASE-MFS-25363-1] c31 N80-32585
- Method for applying photographic resists to otherwise incompatible substrates
[NASA-CASE-MSC-18107-1] c27 N81-25209
- Method of making V-MOS field effect transistors utilizing a two-step anisotropic etching and ion implantation
[NASA-CASE-GSC-12515-1] c33 N81-26360
- ETHANE**
- Synthesis of multifunction triaryltrifluoroethanes
[NASA-CASE-ARC-11097-1] c23 N78-22154
- Synthesis of multifunction triaryltrifluoroethanes
[NASA-CASE-ARC-11097-2] c23 N78-22155
- ETHERS**
- Method for producing alternating ether-siloxane copolymers with stable properties when exposed to elevated temperatures and UV radiation
[NASA-CASE-XNP-02584] c06 N71-20905
- Chemical synthesis of hydroxy terminated perfluoro ethers as intermediates for highly fluorinated polyurethane resins
[NASA-CASE-NPO-10768] c06 N71-27254
- Formation of polyurethane resins from hydroxy terminated perfluoro ethers
[NASA-CASE-NPO-10768-2] c06 N72-27144

ETHYLENE COMPOUNDS

Precision heat forming of tetrafluoroethylene tubing
[NASA-CASE-MSC-18430-1] c31 N80-17292

ETHYLENE OXIDE

Using ethylene oxide in preparation of sterilized solid rocket propellants and encapsulating materials
[NASA-CASE-XNP-01749] c27 N70-41897
Ethylene oxide sterilization and encapsulating process for sterile preservation of instruments and solid propellants
[NASA-CASE-XNP-09763] c14 N71-20461
System for sterilizing objects --- cleaning space vehicle systems
[NASA-CASE-KSC-11085-1] c54 N81-24724

EUTECTIC ALLOYS

Bonding of sapphire to sapphire by eutectic mixture of aluminum oxide and zirconium oxide
[NASA-CASE-GSC-11577-1] c37 N75-15992
Method of growing composites of the type exhibiting the Soret effect --- improved structure of eutectic alloy crystals
[NASA-CASE-MPS-22926-1] c24 N77-27187
Directionally solidified eutectic gamma plus beta nickel-base superalloys
[NASA-CASE-LEW-12906-1] c26 N77-32279
Directionally solidified eutectic gamma-gamma nickel-base superalloys
[NASA-CASE-LEW-12905-1] c26 N78-18183
Bonding of sapphire to sapphire by eutectic mixture of aluminum oxide and zirconium oxide
[NASA-CASE-GSC-11577-3] c24 N79-25143

EVACUATING (VACUUM)

Filling honeycomb matrix with deaerated paste filler
[NASA-CASE-XMS-01108] c15 N69-24322
Sealing evacuation port and evacuating vacuum container such as space jackets
[NASA-CASE-XMP-03290] c15 N71-23256
Gas leak detection in evacuated systems using ultraviolet radiation probe
[NASA-CASE-ERC-10034] c15 N71-24896
Evacuated, displacement compression mold --- of tubular bodies from thermosetting plastics
[NASA-CASE-LAB-10782-2] c31 N75-13111

EVAPORATION

Evaporating crucible of tantalum-tungsten foil, nickel alumina bonding agent, and ceramic coating
[NASA-CASE-XLA-03105] c15 N69-27483

EVAPORATIVE COOLING

Tubular sublimatory evaporator heat sink
[NASA-CASE-ARC-10912-1] c34 N77-19353
Refrigerator module, system and process --- regenerative, cryogenic cooling of an infrared radiation detection system
[NASA-CASE-ARC-11263-1] c31 N81-27328

EVAPORATORS

Spatter proof evaporant source design for use in vacuum deposition of solid thin films on substrates
[NASA-CASE-XMP-06065] c15 N71-20395
Means of vapor deposition using electric current and evaporator filament
[NASA-CASE-LAB-10541-1] c15 N72-32487

EXAMINATION

Apparatus for use in examining the lattice of a semiconductor wafer by X-ray diffraction
[NASA-CASE-MPS-23315-1] c76 N78-24950

EXCLUSION

Counter pumping debris excluder and separator --- gas turbine shaft seals
[NASA-CASE-LEW-11855-1] c67 N78-25690

EXHAUST GASES

Device for adding water to high velocity exhaust jets to reduce velocity, noise, and temperature
[NASA-CASE-XMP-01813] c28 N70-41582
Gas turbine exhaust nozzle --- for noise reduction
[NASA-CASE-LEW-11569-1] c07 N74-15453
Abating exhaust noises in jet engines
[NASA-CASE-ARC-10712-1] c67 N74-33218
Exhaust flow deflector --- for ducted gas flow
[NASA-CASE-LAB-11570-1] c34 N76-18364
Gas turbine engine with recirculating bleed
[NASA-CASE-LEW-12452-1] c07 N78-25089
High performance ammonium nitrate propellant
[NASA-CASE-NPO-14260-1] c28 N79-28342

Heat pipes to reduce engine exhaust emissions
[NASA-CASE-LEW-12590-1] c25 N81-19245
Supercritical fuel injection system
[NASA-CASE-LEW-12990-1] c07 N81-29129

EXHAUST NOZZLES

High thrust annular liquid propellant rocket engine and exhaust nozzle design
[NASA-CASE-XLE-00078] c28 N70-33284
Exhaust nozzle with afterburning for generating thrust
[NASA-CASE-XLA-00154] c28 N70-33374
Penshaped, supersonic exhaust nozzle design
[NASA-CASE-XLE-00057] c28 N70-38711
Automatic ejection valve for attitude control and midcourse guidance of space vehicles
[NASA-CASE-XNP-00676] c15 N70-38996
Two dimensional wedge/translating shroud nozzle
[NASA-CASE-LAR-11919-1] c07 N78-27121
Variable area exhaust nozzle
[NASA-CASE-LEW-12378-1] c07 N79-14097
Propulsive lateral control nozzle
[NASA-CASE-LAR-12136-1] c08 N81-33210

EXOTHERMIC REACTIONS

Ambient cure polyimide foams --- thermal resistant foams
[NASA-CASE-ARC-11170-1] c27 N79-11215

EXPANDABLE STRUCTURES

Expanding and contracting connector strip for solar cell array of Nimbus satellite
[NASA-CASE-XGS-01395] c03 N69-21539
Method of compactly packaging centrifugally expandable lightweight flexible reflector satellite
[NASA-CASE-XLA-00138] c31 N70-37981
Foldable conduit capable of springing back as self erecting structural member
[NASA-CASE-XLE-00620] c32 N70-41579
Collapsible high gain antenna which can be automatically expanded to operating state
[NASA-CASE-KSC-10392] c07 N73-26117
Expandable space frames with high expansion to collapse ratio
[NASA-CASE-BEC-10365-1] c31 N73-32749
Means for accommodating large overstrain in lead wires --- by storing extra length of wire in stretchable loop
[NASA-CASE-LAR-10168-1] c33 N74-22865
Antenna deployment mechanism for use with a spacecraft --- extensible and retractable telescopic antenna mast
[NASA-CASE-GSC-12331-1] c18 N80-14183

EXPANSION

Apparatus for measuring polymer membrane expansion in electrochemical cells
[NASA-CASE-XGS-03865] c14 N69-21363
Method for alleviating thermal stress damage in laminates
[NASA-CASE-LEW-12493-2] c24 N81-26179

EXPERIMENTAL DESIGN

Efficient operation of improved hydrofoil design
[NASA-CASE-XLA-00229] c12 N70-33305
Sealed electric storage battery with gas manifold interconnecting each cell
[NASA-CASE-XNP-03378] c03 N71-11051
Electrode attached to helmets for detecting low level signals from skin of living creatures
[NASA-CASE-ARC-10043-1] c05 N71-11193
Conditioning suit for normal function of astronaut cardiovascular system in gravity environment
[NASA-CASE-XLA-02898] c05 N71-20268
Space suit using nonflexible material with low leakage and providing protection against thermal extremes, physical punctures, and radiation with high mobility articulation
[NASA-CASE-XAC-07043] c05 N71-23161

EXPIRED AIR

Metabolic rate meter and method
[NASA-CASE-MSC-12239-1] c52 N79-21750

EXPLOSIONS

Device for detection of combustion light preceding gaseous explosions
[NASA-CASE-LAB-10739-1] c14 N73-16484

EXPLOSIVE DEVICES

Stage separation using remote control release of joint with explosive insert
[NASA-CASE-XLA-02854] c15 N69-27490
Hermetically sealed explosive release mechanism for actuator device

- [NASA-CASE-XGS-00824] c15 N71-16078
Development of non-magnetic indexing device for orienting magnetic flux sensing instrument in magnetic field without generation of detrimental magnetic fields
- [NASA-CASE-XGS-02422] c15 N71-21529
Development of apparatus for detonating explosive devices in order to determine forces generated and detonation propagation rate
- [NASA-CASE-LAR-10800-1] c33 N72-27959
Development and characteristics of squib actuated explosive disconnect for spacecraft release from launch vehicle
- [NASA-CASE-NPO-11330] c33 N73-26958
Pressure limiting propellant actuating system
- [NASA-CASE-MSC-18179-1] c20 N80-18097
- EXPLOSIVE FORMING**
Electric discharge apparatus for electrohydraulic explosive forming
- [NASA-CASE-XMF-00375] c15 N70-34249
- EXPLOSIVE WELDING**
Totally confined explosive welding --- apparatus to reduce noise level and protect personnel during explosive bonding
- [NASA-CASE-LAR-10941-1] c37 N74-21057
Method of making an explosively welded scarf joint
- [NASA-CASE-LAR-11211-1] c37 N75-12326
Totally confined explosive welding
- [NASA-CASE-LAR-10941-2] c37 N79-13364
- EXPLOSIVES**
Production of intermetallic compounds by effect of shock waves from explosions and compaction of powder
- [NASA-CASE-MFS-20861-1] c18 N73-32437
Optically detonated explosive device
- [NASA-CASE-NPO-11743-1] c28 N74-27425
Electroexplosive device
- [NASA-CASE-NPO-13858-1] c28 N79-11231
- EXPONENTIAL FUNCTIONS**
Digital quasi-exponential function generator
- [NASA-CASE-NPO-11130] c08 N72-20176
- EXPOSURE**
Mechanical exposure interlock device for preventing film overexposure in oscilloscope camera
- [NASA-CASE-LAR-10319-1] c14 N73-32322
Selective image area control of X-ray film exposure density
- [NASA-CASE-NPO-13808-1] c35 N78-15461
Method of and apparatus for double-exposure holographic interferometry
- [NASA-CASE-MFS-25405-1] c35 N81-27459
- EXPULSION BLADDERS**
Expulsion bladder equipped storage tank structure
- [NASA-CASE-XNP-00612] c11 N70-38182
- EXTENSIONS**
Support for flexible conductor cable between drawers or racks holding electronic equipment and cabinet assembly housing drawers or racks
- [NASA-CASE-XMF-07587] c15 N71-18701
- EXTENSOMETERS**
Transducer frame for use with extensometer to continuously monitor specimen sample
- [NASA-CASE-XLA-10322] c15 N72-17452
Conductive elastomeric extensometer
- [NASA-CASE-MFS-21049-1] c52 N74-27864
Amplifying ribbon extensometer
- [NASA-CASE-LAR-11825-1] c35 N77-22449
Laser extensometer
- [NASA-CASE-MFS-19259-1] c36 N78-14380
- EXTERNAL COMBUSTION ENGINES**
Hot gas engine with dual crankshafts
- [NASA-CASE-NPO-14221-1] c37 N81-25370
- EXTERNAL STORES**
Decoupler pylon: wing/store flutter suppressor
- [NASA-CASE-LAR-12468-1] c08 N80-22359
- EXTRACTION**
Liquid-gas separator adapted for use in zero gravity environment - drawings
- [NASA-CASE-XMS-01624] c15 N70-40062
Chassis unit insert tightening-extract device
- [NASA-CASE-XMS-01077-1] c37 N79-33467
- EXTRAVEHICULAR ACTIVITY**
Portable environmental control and life support system for astronaut in and out of spacecraft
- [NASA-CASE-XMS-09632-1] c05 N71-11203
Hand-held maneuvering unit for propulsion and attitude control of astronauts in zero or reduced gravity environment
- [NASA-CASE-XMS-05304] c05 N71-12336
Internal and external serpentine devices for performing physical operations around orbital space stations
- [NASA-CASE-XMF-05344] c31 N71-16345
Releasable, pin-type fastener, easily operated during EVA
- [NASA-CASE-ARC-10140-1] c15 N71-17653
Design and development of flexible tunnel for use by spacecrews in performing extravehicular activities
- [NASA-CASE-MSC-12243-1] c05 N71-24728
Open loop life support subsystem using breathing bag as reservoir for EVA
- [NASA-CASE-MSC-12411-1] c05 N72-20096
Intra- and extravehicular life support space suite for Apollo astronauts
- [NASA-CASE-MSC-12609-1] c05 N73-32012
- EXTREMELY LOW RADIO FREQUENCIES**
VHF/UHF parasitic probe antenna for spacecraft communication
- [NASA-CASE-XKS-09340] c07 N71-24614
Frequency tracked pulse technique for ultrasonic analysis
- [NASA-CASE-LAR-12697-1] c32 N80-26571
- EXTRUDING**
Extrusion can for extruding ceramics under heat and pressure
- [NASA-CASE-NPO-10812] c15 N73-13464
Brazing alloy binder
- [NASA-CASE-XMF-05868] c26 N75-27125
Continuous coal processing method
- [NASA-CASE-NPO-13758-2] c31 N81-15154
- EYE (ANATOMY)**
Sight switch using infrared source and sensor mounted beside eye
- [NASA-CASE-XMF-03934] c09 N71-22985
Ultrasonic device for ophthalmic eye surgery with safe removal of macerated material
- [NASA-CASE-LEW-11669-1] c05 N73-27062
Spectrally balanced chromatic landing approach lighting system
- [NASA-CASE-ARC-10990-1] c04 N77-12031
Corneal seal device
- [NASA-CASE-LEW-12258-1] c52 N77-28716
Intra-ocular pressure normalization technique and equipment
- [NASA-CASE-LEW-12723-1] c52 N80-18690
Chromatically corrected virtual image visual display --- reducing eye strain in flight simulators
- [NASA-CASE-LAR-12251-1] c74 N80-27185
- EYE EXAMINATIONS**
Automated visual sensitivity tester for determining visual field sensitivity and blind spot size
- [NASA-CASE-ARC-10329-1] c05 N73-26072
Multiparameter vision testing apparatus
- [NASA-CASE-MSC-13601-2] c54 N75-27759
Visual examination apparatus
- [US-PATENT-RE-28,921] c52 N76-30793
- EYEPieces**
Wide angle eyepiece with long eye-relief distance
- [NASA-CASE-XMS-06056-1] c23 N71-24857
- F**
- FABRICATION**
Fabrication of pressure-telemetry transducers
- [NASA-CASE-XNP-09752] c14 N69-21541
Fabrication method for lightweight regeneratively cooled combustion chamber of channel construction
- [NASA-CASE-XLE-00150] c28 N70-41818
Fabrication methods for matrices of solar cell submodules
- [NASA-CASE-XNP-05821] c03 N71-11056
Capacitor fabrication by solidifying mixture of ferromagnetic metal particles, nonferromagnetic particles, and dielectric material
- [NASA-CASE-LEW-10364-1] c09 N71-13522
Method and apparatus for fabricating solar cell panels
- [NASA-CASE-XNP-03413] c03 N71-26726
Fabrication of root cord restrained fabric suit sections from sheets of fabric
- [NASA-CASE-MSC-12398] c05 N72-20098

- Method of fabricating equal length insulated wire
[NASA-CASE-FRC-10038] c15 N72-20444
- Development of thin film temperature sensor from
TaO
[NASA-CASE-NPO-11775] c26 N72-28761
- Fabrication of polycrystalline solar cells on
low-cost substrates
[NASA-CASE-GSC-12022-1] c44 N76-28635
- Lightweight reflector assembly
[NASA-CASE-NPO-13707-1] c74 N77-28933
- Process for spinning flame retardant elastomeric
compositions --- fabricating synthetic fibers
for high oxygen environments
[NASA-CASE-MSC-14331-3] c27 N78-32262
- Solar array strip and a method for forming the
same
[NASA-CASE-NPO-13652-1] c44 N79-17314
- Method for fabricating solar cells having
integrated collector grids
[NASA-CASE-LEW-12819-2] c44 N79-18444
- Bonding machine for forming a solar array strip
[NASA-CASE-NPO-13652-2] c44 N79-24431
- Method for forming a solar array strip
[NASA-CASE-NPO-13652-3] c44 N80-14474
- Castable high temperature refractory materials
[NASA-CASE-LEW-13080-1] c27 N80-29496
- Induced junction solar cell and method of
fabrication
[NASA-CASE-NPO-13786-1] c44 N80-29835
- High voltage V-groove solar cell
[NASA-CASE-LEW-13401-1] c44 N81-16529
- Copper doped polycrystalline silicon solar cell
[NASA-CASE-NPO-14670-1] c44 N81-19558
- Heat exchanger and method of making
[NASA-CASE-LEW-12441-3] c44 N81-24519
- Schottky barrier cell and method of fabricating it
[NASA-CASE-NPO-13689-4] c44 N81-26553
- FABRICS**
- Fabrication of root cord restrained fabric suit
sections from sheets of fabric
[NASA-CASE-MSC-12398] c05 N72-20098
- Amplifying ribbon extensometer
[NASA-CASE-LAR-11825-1] c35 N77-22449
- Nozzle extraction process and handlemeter for
measuring handle
[NASA-CASE-LAR-12147-1] c31 N79-11246
- Adjustable high emittance gap filler --- reentry
shielding for space shuttle vehicles
[NASA-CASE-ARC-11310-1] c27 N80-23454
- Heat sealable, flame and abrasion resistant
coated fabric
[NASA-CASE-MSC-18382-1] c27 N80-24440
- Absorbent product and articles made therefrom
--- for collection of human wastes
[NASA-CASE-MSC-18223-1] c24 N81-16127
- Composition and method for making polyimide
resin-reinforced fabric
[NASA-CASE-LEW-12933-1] c27 N81-19296
- FABRY-PEROT INTERFEROMETERS**
- Fabry-Perot interferometer retrodirective
reflector modulator for optical communication
[NASA-CASE-XGS-04480] c16 N69-27491
- FACSIMILE COMMUNICATION**
- Restoration and improvement of demodulated
facsimile video signals
[NASA-CASE-GSC-10185-1] c07 N72-12081
- Spectrometer integrated with a facsimile camera
[NASA-CASE-LAR-11207-1] c35 N75-19613
- FACTORIAL DESIGN**
- Space suit with pressure-volume compensator system
[NASA-CASE-XLA-05332] c05 N71-11194
- Equipotential space suits utilizing mechanical
aids to minimize astronaut energy at bending
joints
[NASA-CASE-LAR-10007-1] c05 N71-11195
- FAIL-SAFE SYSTEMS**
- Fail-safe multiple transformer circuit
configuration
[NASA-CASE-NPO-11078] c09 N72-25262
- Latch mechanism
[NASA-CASE-MSC-12549-1] c37 N74-27903
- Safety flywheel --- using flexible materials
energy storage
[NASA-CASE-HQN-10888-1] c44 N79-14527
- Module failure isolation circuit for paralleled
inverters --- preventing system failure during
power conditioning for spacecraft applications
[NASA-CASE-NPO-14000-1] c33 N79-24254
- Reconfiguring redundancy management
[NASA-CASE-MSC-18498-1] c60 N80-30050
- Apparatus for sensor failure detection and
correction in a gas turbine engine control
system
[NASA-CASE-LEW-12907-2] c07 N81-19115
- FAILURE ANALYSIS**
- Fatigue failure load indicator
[NASA-CASE-LAR-12027-1] c39 N79-22537
- FAILURE MODES**
- Method for reducing mass of ball bearings for
long life operation at high speed
[NASA-CASE-LEW-10856-1] c15 N72-22490
- Inverter ratio failure detector
[NASA-CASE-NPO-13160-1] c35 N74-18090
- FAIRINGS**
- System for deploying and ejecting releasable
clamshell fairing sections from spinning
sounding rockets
[NASA-CASE-GSC-10590-1] c31 N73-14853
- FALLING SPHERES**
- Device for determining acceleration of gravity
by interferometric measurement of travel of
falling body
[NASA-CASE-XNP-05844] c14 N71-17587
- Method of forming frozen spheres in a force-free
drop tower --- microballcons for inertial
confinement fusion
[NASA-CASE-NPO-14845-1] c31 N81-16328
- FAR INFRARED RADIATION**
- Collimator for analyzing spatial location of
near and distant sources of radiation
[NASA-CASE-MFS-20546-2] c14 N73-30389
- FAR ULTRAVIOLET RADIATION**
- Transient heat transfer gage for measuring total
radiant intensity from far ultraviolet and
ionized high temperature gases
[NASA-CASE-XNP-09802] c33 N71-15641
- FARADAY EFFECT**
- Faraday rotation measurement method and apparatus
--- to receive RF signals from spacecraft
which exhibits polarization characteristics
due to spin stabilization
[NASA-CASE-NPO-14839-1] c35 N80-16313
- FASTENERS**
- Force measuring instrument for structural
members, particularly fastening bolts or studs
[NASA-CASE-XNP-00456] c14 N70-34705
- Lightweight life preserver without fastening
devices
[NASA-CASE-XMS-00864] c05 N70-36493
- Nut and bolt fastener permitting all-directional
movement of skin sections with respect to
supporting structure
[NASA-CASE-XLA-01807] c15 N71-10799
- Releasable, pin-type fastener, easily operated
during EVA
[NASA-CASE-ARC-10140-1] c15 N71-17653
- Ultrasonic wrench for applying vibratory energy
to mechanical fasteners
[NASA-CASE-MFS-20586] c15 N71-17686
- Design and development of electric connectors
for rigid and semirigid coaxial cables
[NASA-CASE-XNP-04732] c09 N71-20851
- Design, development, and characteristics of
latching mechanism for operation in limited
access areas
[NASA-CASE-XMS-03745] c15 N71-21076
- Design and development of module joint clamping
device for application to solar array
construction
[NASA-CASE-XNP-02341] c15 N71-21531
- Threadless fastener apparatus comprising
receiving apertures for plurality of articles,
self-locked condition, and capable of using
nonmalleable materials in both ends
[NASA-CASE-XPR-05302] c15 N71-23254
- Development of resilient fastener for attaching
skin of aerospace vehicles to permit movement
of skin relative to framework
[NASA-CASE-XLA-01027] c31 N71-24035
- Pneumatic mechanism for releasing hook and loop
fasteners between large rigid structures
[NASA-CASE-XMS-10660-1] c15 N71-25975
- Helmet latching and attaching ring
[NASA-CASE-XMS-04670] c54 N78-17678
- Chassis unit insert tightening-extract device
[NASA-CASE-XMS-01077-1] c37 N79-33467

- One step dual purpose joining technique
[NASA-CASE-LAR-12595-1] c37 N80-11469
- FATIGUE (MATERIALS)**
- Servocontrol system for measuring local stresses at geometric discontinuity in stressed material
[NASA-CASE-XLA-08530] c32 N71-25360
- TV fatigue crack monitoring system
[NASA-CASE-LAR-11490-1] c39 N78-16387
- Pulsed phase locked loop strain monitor
[NASA-CASE-LAR-12772-1] c33 N81-15195
- Antenna grout replacement system
[NASA-CASE-NPO-15205-1] c37 N81-19457
- FATIGUE LIFE**
- Fatigue resistant shear pin with hollow shaft and two plugs
[NASA-CASE-XLA-09122] c15 N69-27505
- Improving load capacity and fatigue life of rolling element systems in rockets and missiles
[NASA-CASE-XLE-02999] c15 N71-16052
- Method for reducing mass of ball bearings for long life operation at high speed
[NASA-CASE-LEW-16856-1] c15 N72-22490
- Fatigue life of hybrid antifriction bearings at ultrahigh speeds
[NASA-CASE-LEW-11152-1] c15 N73-32359
- Machine for use in monitoring fatigue life for a plurality of elastomeric specimens
[NASA-CASE-NPO-13731-1] c39 N78-10493
- FATIGUE TESTING MACHINES**
- Cryostat for use with horizontal fatigue testing machines at low temperatures
[NASA-CASE-XNP-10968] c14 N71-24234
- Fatigue testing apparatus with light shield and infrared reflector for high temperature evaluation of loaded sheet samples
[NASA-CASE-XLA-01782] c14 N71-26136
- FATIGUE TESTS**
- Fatigue testing device applying random discrete load levels to test specimen and applicable to aircraft structures
[NASA-CASE-XLA-02131] c32 N70-42003
- Fatigue failure load indicator
[NASA-CASE-LAR-12027-1] c39 N79-22537
- Heating and cooling system --- for fatigue test specimens
[NASA-CASE-LAR-12393-1] c39 N80-25693
- FATS**
- Oil and fat absorbing polymers
[NASA-CASE-NPO-11609-2] c27 N77-31308
- FECES**
- Fecal waste disposal container
[NASA-CASE-XNS-06761] c05 N69-23192
- FEED SYSTEMS**
- Nonconductive tube as feed system for plasma thruster
[NASA-CASE-XLE-02902] c25 N71-21694
- Method and apparatus for pressurizing propellant tanks used in propulsion motor feed system
[NASA-CASE-XNP-00650] c27 N71-28929
- Pressurized tank for feeding liquid waste into processing equipment
[NASA-CASE-LAR-10365-1] c05 N72-27102
- Pressurized inert gas feed for lighting system
[NASA-CASE-KSC-10644] c09 N72-27227
- Dual frequency feed systems for Cassegrainian antennas
[NASA-CASE-NPO-13091-1] c09 N73-12214
- Improved injector with porous plug for bubbles of gas into feed lines of electrically conductive liquid
[NASA-CASE-NPO-11377] c15 N73-27406
- Supercharged topping rocket propellant feed system
[NASA-CASE-XLE-02062-1] c20 N80-14188
- Method of producing silicon --- gas phase reactor multiple injector liquid feed system
[NASA-CASE-NPO-14382-1] c31 N80-18231
- Continuous coal processing method
[NASA-CASE-NPO-13758-2] c31 N81-15154
- FEEDBACK**
- RC networks with voltage amplifier, RC input circuit, and positive feedback
[NASA-CASE-ARC-10020] c10 N72-17172
- Multistage feedback shift register with states decomposable into cycles of equal length
[NASA-CASE-NPO-11082] c08 N72-22167
- Inverter oscillator with voltage feedback
[NASA-CASE-NPO-10760] c09 N72-25254
- FEEDBACK AMPLIFIERS**
- Development of system with electrical properties which vary with changes in temperature for use with feedback loop in operational amplifier circuit
[NASA-CASE-MSC-13276-1] c14 N71-27058
- Phase locked demodulator with bandwidth switching amplifier circuit
[NASA-CASE-XNP-01107] c10 N71-28859
- Monostable multivibrator for producing output pulse widths with positive feedback NOR gates
[NASA-CASE-MSC-13492-1] c10 N71-28860
- High stability amplifier
[NASA-CASE-GSC-12646-1] c33 N81-32391
- FEEDBACK CIRCUITS**
- Low power drain transistor feedback circuit
[NASA-CASE-XGS-04999] c09 N69-24317
- Linear three-tap feedback shift register
[NASA-CASE-NPO-10351] c08 N71-12503
- Frequency control network for current feedback oscillators converting dc voltage to ac or higher dc voltages
[NASA-CASE-GSC-10041-1] c10 N71-19418
- Feedback integrating circuit with grounded capacitor for signal processing
[NASA-CASE-XAC-10607] c10 N71-23669
- Development of idler feedback system to reduce electronic noise problem in two parametric amplifiers
[NASA-CASE-LAR-10253-1] c09 N72-25258
- Linear shift register with feedback logic for generating pseudonoise linear recurring binary sequences
[NASA-CASE-NPO-11406] c08 N73-12175
- Logarithmic circuit with wide dynamic range
[NASA-CASE-GSC-12145-1] c33 N78-32339
- Automatic level control circuit
[NASA-CASE-KSC-11170-1] c33 N81-29347
- FEEDBACK CONTROL**
- Describing continuous analog to digital converter with parallel digital output and nonlinear feedback
[NASA-CASE-XAC-04031] c08 N71-18594
- Pulsed magnetic core memory element with blocking oscillator feedback for interrogation without loss of digital information
[NASA-CASE-XGS-03303] c08 N71-18595
- Binary to decimal decoder logic circuit design with feedback control and display device
[NASA-CASE-XKS-06167] c08 N71-24890
- Feedback control for direct current motor to achieve constant speed under varying loads
[NASA-CASE-MFS-14610] c09 N71-28886
- Feedback controller for sampling error signals within single control formulation time interval
[NASA-CASE-GSC-10554-1] c08 N71-29033
- Closed loop servosystem for variable speed tape recorders onboard spacecraft
[NASA-CASE-NPO-10700] c07 N71-33613
- Development of aerodynamic control system to control flutter over large range of oscillatory frequencies using stability augmentation techniques
[NASA-CASE-LAR-10682-1] c02 N73-26004
- Regulated dc-to-dc converter for voltage step-up or step-down with input-output isolation
[NASA-CASE-HQN-10792-1] c33 N74-11049
- Diffused waveguiding capillary tube with distributed feedback for a gas laser
[NASA-CASE-NPO-13544-1] c36 N76-18428
- The dc-to-dc converters employing staggered-phase power switches with two-loop control
[NASA-CASE-NPO-13512-1] c33 N77-10428
- System and method for tracking a signal source --- employing feedback control
[NASA-CASE-HQN-10880-1] c17 N78-17140
- Closed loop spray cooling apparatus --- for particle accelerator targets
[NASA-CASE-LEW-11981-1] c31 N78-17237
- Wide power range microwave feedback controller
[NASA-CASE-GSC-12146-1] c33 N78-32340
- Discriminator aided phase lock acquisition for suppressed carrier signals
[NASA-CASE-NPO-14311-1] c32 N79-14276
- Active notch filter network with variable notch depth, width and frequency
[NASA-CASE-FRC-11055-1] c33 N80-29583
- FEEDBACK FREQUENCY MODULATION**
- Method and apparatus for communicating through ionized layer of gases surrounding spacecraft

- during reentry into planetary atmospheres
[NASA-CASE-XLA-01127] c07 N70-41372
- Characteristics of data-aided carrier tracking
loop used for tracking carrier in angle
modulated communications system
[NASA-CASE-NPO-11282] c10 N73-16205
- Linear phase demodulator including a phase
locked loop with auxiliary feedback loop
[NASA-CASE-GSC-12018-1] c33 N77-14334
- FEDBERS**
Automatic real-time pair-feeding system for
animals
[NASA-CASE-ARC-10302-1] c51 N74-15778
- FELTS**
Thermal insulation attaching means --- adhesive
bonding of felt vibration insulators under
ceramic tiles
[NASA-CASE-MSC-12619-2] c27 N79-12221
- FEMALIS**
Liquid cooled brassiere and method of diagnosing
malignant tumors therewith
[NASA-CASE-ARC-11007-1] c52 N77-14736
- Urine collection device
[NASA-CASE-MSC-16433-1] c52 N78-27750
- Urine collection apparatus --- feminine hygiene
[NASA-CASE-MSC-18381-1] c52 N81-28740
- FERRITES**
Magnetic recording head composed of ferrite core
coated with thin film of aluminum-iron-silicon
alloy
[NASA-CASE-GSC-10097-1] c08 N71-27210
- Method for making conductors for ferrite memory
arrays --- from pre-formed metal conductors
[NASA-CASE-LAR-10994-1] c24 N75-13032
- Device for measuring the ferrite content in an
austenitic stainless-steel weld
[NASA-CASE-MPS-22907-1] c26 N76-18257
- FERROMAGNETIC MATERIALS**
Magnetic heat pumping
[NASA-CASE-LBW-12508-1] c34 N78-17335
- FERROMAGNETISM**
High temperature ferromagnetic cobalt-base alloy
for electrical power generating equipment
[NASA-CASE-XLE-03629] c17 N71-23248
- FIBER COMPOSITES**
Fibrous refractory composite insulation ---
shielding reusable spacecraft
[NASA-CASE-ARC-11169-1] c24 N79-24062
- Method for making patterns for resin matrix
composites
[NASA-CASE-ARC-11246-1] c24 N80-22410
- A method and technique for installing
light-weight fragile, high-temperature fiber
insulation --- spacecraft heat sealing
[NASA-CASE-MSC-16934-2] c37 N81-16468
- Universal connectors for joining stringers
[NASA-CASE-LAR-12744-1] c37 N81-31551
- FIBER OPTICS**
Fiber optic transducers for monitoring and
analysis of vibration in aerospace vehicles
and onboard equipment
[NASA-CASE-XMP-02433] c14 N71-10616
- Fiber distributed feedback laser
[NASA-CASE-NPO-13531-1] c36 N76-24553
- Fiber optic multiplex optical transmission system
[NASA-CASE-KSC-11047-1] c74 N78-14889
- Low intensity X-ray and gamma-ray imaging device
--- fiber optics
[NASA-CASE-GSC-12263-1] c74 N79-20857
- Low intensity X-ray and gamma-ray imaging
spectrometer
[NASA-CASE-GSC-12587-1] c35 N80-29635
- A fiber optic transmission line stabilization
apparatus and method
[NASA-CASE-NPO-15036-1] c74 N80-34250
- Fiber optic crossbar switch for automatically
patching optical signals
[NASA-CASE-KSC-11104-1] c74 N81-12862
- Precise RF timing signal distribution to remote
stations --- fiber optics
[NASA-CASE-NPO-14749-1] c32 N81-14186
- Optical crystal temperature gauge with fiber
optic connections --- cryogenic systems
[NASA-CASE-MSC-18627-1] c74 N81-15818
- Apparatus for fiber optic liquid level sensing
[NASA-CASE-MSC-18674-1] c74 N81-24907
- Interleaving device
[NASA-CASE-GSC-12111-2] c33 N81-29342
- Optical gyroscope system
[NASA-CASE-NPO-14258-1] c35 N81-33448
- FIBER REINFORCED COMPOSITES**
Fiberglass/epoxy composite automotive door
structure including a glass-reinforced
intrusion strip
[NASA-CASE-NPO-15057-1] c24 N81-19230
- Composition and method for making polyimide
resin-reinforced fabric
[NASA-CASE-LBW-12933-1] c27 N81-19296
- FIBER RELEASE**
Curing agent for polyepoxides and epoxy resins
and composites cured therewith --- preventing
carbon fiber release
[NASA-CASE-LBW-13226-1] c27 N81-17260
- FIBERS**
Process for fiberizing ceramic materials with
high fusion temperatures and tensile strength
[NASA-CASE-XNP-00597] c18 N71-23088
- Method and apparatus for fluffing, separating,
and cleaning fibers
[NASA-CASE-LAR-11224-1] c37 N76-18456
- Composite lamination method
[NASA-CASE-LAR-12019-1] c24 N78-17150
- Dual membrane hollow fiber fuel cell and method
of operating same
[NASA-CASE-NPO-13732-1] c44 N79-10513
- Ion-exchange hollow fibers
[NASA-CASE-NPO-13309-1] c25 N81-19244
- FIELD EFFECT TRANSISTORS**
Frequency to analog converters with unipolar
field effect transistor for determining
potential charge by pulse duration of input
signal
[NASA-CASE-XNP-07040] c08 N71-12500
- Voltage controlled, variable frequency
relaxation oscillator with MOSFET variable
current feed
[NASA-CASE-GSC-10022-1] c10 N71-25882
- Circuitry for high input impedance video
processor with high noise immunity
[NASA-CASE-NPO-10199] c09 N72-17156
- Development and characteristics of data
multiplexer circuit using field effect
transistors arranged in tree switching
configuration
[NASA-CASE-NPO-11333] c08 N72-22162
- Single integrated circuit chip with field effect
transistor
[NASA-CASE-GSC-10835-1] c09 N72-33205
- Radiation hardening of MOS devices by boron ---
for stabilizing gate threshold potential of
field effect device
[NASA-CASE-GSC-11425-1] c76 N74-20329
- Stored charge transistor
[NASA-CASE-NPO-11156-2] c33 N75-31331
- Field effect transistor and method of
construction thereof
[NASA-CASE-MPS-23312-1] c33 N78-27326
- JFET oscillator
[NASA-CASE-GSC-12555-1] c33 N80-26601
- Method of making V-MOS field effect transistors
utilizing a two-step anisotropic etching and
ion implantation
[NASA-CASE-GSC-12515-1] c33 N81-26360
- CCD correlated quadruple sampling processor
[NASA-CASE-NPO-14426-1] c33 N81-27396
- FIELD EMISSION**
Electrode with multiple columnar conductors for
limiting field emission current
[NASA-CASE-BRC-10015-2] c10 N72-27246
- FILAMENT WINDING**
Tool attachment for spreading or moving away
loose elements from terminal posts during
winding of filamentary elements
[NASA-CASE-XMP-02107] c15 N71-10809
- Fabrication of filament wound propellant tank
for cryogenic storage
[NASA-CASE-XLE-03803-2] c15 N71-17651
- Twisted wire or tube superconductor for filament
windings
[NASA-CASE-LBW-11015] c26 N73-32571
- Method of making reinforced composite structure
[NASA-CASE-LBW-12619-1] c24 N77-19171
- FILAMENTS**
Refractory filament series circuitry for radiant
heater
[NASA-CASE-XLE-00387] c33 N70-34812

- Controlled diffusion reaction process for masking substrate of twisted multifilament superconductive ribbon
[NASA-CASE-LEW-11726-1] c26 N73-26752
- FILLERS**
- Filling honeycomb matrix with deaerated paste filler
[NASA-CASE-XMS-01108] c15 N69-24322
- Intumescent-ablator coatings using endothermic fillers
[NASA-CASE-ARC-11043-1] c24 N78-27180
- Adjustable high emittance gap filler --- reentry shielding for space shuttle vehicles
[NASA-CASE-ARC-11510-1] c27 N80-23454
- Polymeric compositions and their method of manufacture --- forming filled polymer systems using cryogenics
[NASA-CASE-NPO-10424-1] c27 N81-24258
- Polyvinyl alcohol battery separator containing inert filler --- alkaline batteries
[NASA-CASE-LEW-13556-1] c44 N81-27615
- FILM COOLING**
- Multislot film cooled pyrolytic graphite rocket nozzle
[NASA-CASE-XNP-04389] c28 N71-20942
- Curved film cooling admission tube
[NASA-CASE-LEW-13174-1] c34 N81-12363
- FILM THICKNESS**
- Chemical vapor deposition reactor --- providing uniform film thickness
[NASA-CASE-NPO-13650-1] c25 N79-28253
- Dual-beam skin friction interferometer --- portable equipment
[NASA-CASE-ARC-11354-1] c36 N81-29415
- FILES**
- Apparatus for obtaining isotropic irradiation on film emulsion from parallel radiation source
[NASA-CASE-MFS-20095] c24 N72-11595
- Method and apparatus for measurement of trap density and energy distribution in dielectric films
[NASA-CASE-NPO-13443-1] c76 N76-20594
- FILTERS**
- Development of filter system for control of outgas contamination in vacuum conditions using absorbent beds of molecular sieve zeolite, silica gel, and charcoal
[NASA-CASE-MFS-14711] c15 N71-26185
- Heated tungsten filter for removing oxygen impurities from cesium
[NASA-CASE-XNP-04262-2] c17 N71-26773
- Centrifugal lyophobic separator
[NASA-CASE-LAR-10194-1] c34 N74-30608
- FILTRATION**
- Recovery of aluminum from composite propellants
[NASA-CASE-NPO-14110-1] c28 N81-15119
- FINS**
- Thrust and attitude control apparatus using jet nozzle in movable canard surface or fin configuration
[NASA-CASE-XLE-03583] c31 N71-17629
- Deployable flexible ventral fins for use as an emergency spin recovery device in aircraft
[NASA-CASE-LAR-10753-1] c08 N74-30421
- FIRE EXTINGUISHERS**
- Synthesis of dawsonites
[NASA-CASE-ARC-113261-1] c25 N80-31490
- Fire extinguishing apparatus having a slidable mass for a penetrator nozzle --- for penetrating aircraft and shuttle orbiter skin
[NASA-CASE-KSC-11064-1] c31 N81-14137
- FIRE PREVENTION**
- Hydrogen fire blink detector for high altitude rocket or ground installation
[NASA-CASE-MFS-15063] c10 N72-25412
- Method and apparatus for checking fire detectors
[NASA-CASE-GSC-11600-1] c35 N74-21019
- FIREPROOFING**
- Fireproof potassium silicate coating composition, insoluble in water after application
[NASA-CASE-GSC-10072] c18 N71-14014
- Lightweight fire resistant plastic foam for thermal protection of reentry vehicles and aircraft structures
[NASA-CASE-ARC-10180-1] c28 N72-20767
- Intumescent paint containing nitrile rubber for fire protection
[NASA-CASE-ARC-10196-1] c18 N73-13562
- Para-benzoquinone dioxime and concentrated mineral acid processed to yield intumescent or fire resistant, heat insulating materials
[NASA-CASE-ARC-10304-1] c18 N73-26572
- Flexible fire retardant polyisocyanate modified neoprene foam --- for thermal protective devices
[NASA-CASE-ARC-10180-1] c27 N74-12814
- Non-flammable elastomeric fiber from a fluorinated elastomer and containing an halogenated flame retardant
[NASA-CASE-MSC-14331-1] c27 N76-24405
- Flame retardant spandex type polyurethanes
[NASA-CASE-MSC-14331-2] c27 N78-17213
- Fire protection covering for small diameter missiles
[NASA-CASE-ARC-11104-1] c15 N79-26100
- FIBERS**
- Device for generating and controlling combustion products for testing of fire detection system
[NASA-CASE-GSC-11095-1] c14 N72-10375
- Device for detecting hydrogen fires onboard high altitude rockets
[NASA-CASE-MFS-13130] c10 N72-17173
- FIRING (IGNITING)**
- Contamination free separation nut eliminating combustion products from ambient surroundings generated by squib firing
[NASA-CASE-XGS-01971] c15 N71-15922
- FITTINGS**
- Design and development of quick release connector
[NASA-CASE-XLA-01141] c15 N71-13789
- Development and characteristics of strainer for flared tube fitting
[NASA-CASE-XLA-05056] c15 N72-11389
- FIXED WINGS**
- Design of supersonic aircraft with novel fixed, swept wing planform
[NASA-CASE-XLA-04451] c02 N71-12243
- FIXTURES**
- Tool for use in lifting pin supported objects
[NASA-CASE-NPO-13157-1] c37 N74-32918
- Apparatus for positioning modular components on a vertical or overhead surface
[NASA-CASE-LAR-11465-1] c37 N76-21554
- Heat treat fixture and method of heat treating
[NASA-CASE-LAR-11821-1] c26 N80-28492
- FLAME PROBES**
- Flame detector operable in presence of proton radiation
[NASA-CASE-MFS-21577-1] c19 N74-29410
- FLAME RETARDANTS**
- Flame retardant spandex type polyurethanes
[NASA-CASE-MSC-14331-2] c27 N78-17213
- Process for spinning flame retardant elastomeric compositions --- fabricating synthetic fibers for high oxygen environments
[NASA-CASE-MSC-14331-3] c27 N78-32262
- Catalysts for polyimide foams from aromatic isocyanates and aromatic dianhydrides --- flame retardant foams
[NASA-CASE-ARC-11107-1] c25 N80-16116
- Crystalline polyimides --- reinforcing fibers for high temperature composites and adhesives as well as flame retardation
[NASA-CASE-LAR-12099-1] c27 N80-16158
- Heat resistant polymers of oxidized styrylphosphine
[NASA-CASE-MSC-14903-3] c27 N80-24438
- Heat sealable, flame and abrasion resistant coated fabric
[NASA-CASE-MSC-18382-1] c27 N80-24440
- Structural wood panels with improved fire resistance
[NASA-CASE-ARC-11174-1] c24 N81-13999
- Resin composition, process for producing the same, product produced therefrom and process for producing said product
[NASA-CASE-ARC-11331-1] c27 N81-31363
- Phosphorus-containing imide resins
[NASA-CASE-ARC-11368-1] c27 N81-31364
- FLAME SPRAYING**
- Flame or plasma spraying for molybdenum coating of carbon or graphite surfaces to prevent oxidative corrosion
[NASA-CASE-XLA-00302] c15 N71-16077
- Modification of polyurethanes with alkyl halide resins, inorganic salts, and encapsulated volatile and reactive halogen for fuel fire control

[NASA-CASE-ARC-10098-1] c06 N71-24739
 Method of making pressure tight seal for super alloy
 [NASA-CASE-LAR-10170-1] c37 N74-11301
FLAME TEMPERATURE
 Direct heating surface combustor
 [NASA-CASE-LEW-11877-1] c34 N78-27357
FLAMES
 Anodizing method for providing metal surfaces with temperature reducing coatings against flames
 [NASA-CASE-XLE-00035] c33 N71-29151
 Modulated hydrogen ion flame detector
 [NASA-CASE-ARC-10322-1] c35 N76-18403
FLAMMABILITY
 Flammability test chamber for testing materials in certain predetermined environments
 [NASA-CASE-KSC-10126] c11 N71-24985
 Development of apparatus for testing burning rate and flammability of materials
 [NASA-CASE-XMS-05690] c33 N72-25913
 Compound oxidized styrylphosphine --- flame resistant vinyl polymers
 [NASA-CASE-MSC-14903-2] c27 N80-10358
 Ultra-violet process for producing flame resistant polyamides and products produced thereby --- protective clothing for high oxygen environments
 [NASA-CASE-MSC-16074-1] c27 N80-26446
FLANGES
 Cassegrain antenna subreflector flange for suppressing ground noise and increasing antenna transmitting efficiency
 [NASA-CASE-XNP-00683] c09 N70-35425
 Light baffle with oblate hemispheroid surface, and shading flange
 [NASA-CASE-NPO-10337] c14 N71-15604
 Flanged major modular assembly jig
 [NASA-CASE-MSC-19372-1] c39 N76-31562
FLAPS (CONTROL SURFACES)
 Upper surface, external flow, jet-augmented flap configuration for high wing jet aircraft for noise reduction
 [NASA-CASE-XLA-00087] c02 N70-33332
 Assembly for opening flight capsule stabilizing and decelerating flaps with reference to capsule recovery
 [NASA-CASE-XNP-00641] c31 N70-36410
 Direct lift control system having flaps with slots adjacent to their leading edge and particularly adapted for lightweight aircraft
 [NASA-CASE-LAR-10249-1] c02 N71-26110
 Reversed cowl flap inlet thrust augmentor --- with adjustable airfoil
 [NASA-CASE-ARC-10754-1] c07 N75-24736
FLARED BODIES
 Development and characteristics of strainer for flared tube fitting
 [NASA-CASE-XLA-05056] c15 N72-11389
FLAT CONDUCTORS
 Method of making molded electric connector for use with flat conductor cables
 [NASA-CASE-XNP-03498] c15 N71-15986
 Shielded flat conductor cable fabricated by electroless and electrolytic plating
 [NASA-CASE-MFS-13687] c09 N71-28691
 Shielded flat conductor cable of ribbonlike wires laminates in thin flexible insulation
 [NASA-CASE-MFS-13687-2] c09 N72-22198
 Separable flat cable connector with isolated electrical contacts
 [NASA-CASE-MFS-20757] c09 N72-28225
 Method and apparatus for preparing multiconductor cable with flat conductors
 [NASA-CASE-MFS-10946-1] c31 N79-21226
 Edge coating of flat wires
 [NASA-CASE-XNP-05757-1] c31 N79-21227
FLAT PLATES
 Reduced gravity liquid configuration simulator to study propellant behavior in rocket fuel tanks
 [NASA-CASE-XLE-02624] c12 N69-39588
 Exponential horn, copper plate, magnetic hammer, and anvil in apparatus for making diamonds
 [NASA-CASE-MFS-20698] c15 N72-20446
 Heat transfer device
 [NASA-CASE-MFS-22938-1] c34 N76-18374
 Flat-plate heat pipe
 [NASA-CASE-GSC-11998-1] c34 N77-32413

Solar engine --- Flat plate type
 [NASA-CASE-LAR-12148-1] c44 N79-29608
FLEXIBILITY
 Weatherproof helix antenna
 [NASA-CASE-XKS-08485] c07 N71-19493
 Flexible bellows joint shielding sleeve for propellant transfer pipelines
 [NASA-CASE-XNP-01855] c15 N71-28937
 Flexible joint for pressurizable garment
 [NASA-CASE-MSC-11072] c54 N74-32546
 Nozzle extraction process and handlemeter for measuring handle
 [NASA-CASE-LAR-12147-1] c31 N79-11246
 Safety flywheel --- using flexible materials energy storage
 [NASA-CASE-HQN-10888-1] c44 N79-14527
FLEXIBLE BODIES
 Flexible backup bar for welding awkwardly shaped structures
 [NASA-CASE-XNP-00722] c15 N70-40204
 Characteristics of hermetically sealed electric switch with flexible operating capability
 [NASA-CASE-XNP-09808] c09 N71-12518
 Flexible composite membrane structure impervious to extremely reactive chemicals in rocket propellants
 [NASA-CASE-XNP-08837] c18 N71-16210
 Development and characteristics of self supporting space vehicle
 [NASA-CASE-XLA-00117] c31 N71-17680
 Design and development of flexible tunnel for use by spacecrews in performing extravehicular activities
 [NASA-CASE-MSC-12243-1] c05 N71-24728
 Vibration control of flexible bodies in steady accelerating environment
 [NASA-CASE-LAR-10106-1] c15 N71-27169
 Flexible barrier membrane comprising porous substrate and incorporating liquid gallium or indium metal used as sealant barriers for spacecraft walls and pumping liquid propellants
 [NASA-CASE-XNP-08881] c17 N71-28747
 Development of device for simulating cyclic thermal loading of flexible materials by application of mechanical stresses and deformations
 [NASA-CASE-LAR-10270-1] c32 N72-25877
 Deployable flexible ventral fins for use as an emergency spin recovery device in aircraft
 [NASA-CASE-LAR-10753-1] c08 N74-30421
 Internally supported flexible duct joint --- device for conducting fluids in high pressure systems
 [NASA-CASE-MFS-19193-1] c37 N75-19686
 Surface conforming thermal/pressure seal --- for control devices in space vehicles
 [NASA-CASE-MSC-18422-1] c37 N80-14400
 Strong thin membrane structure --- solar sails
 [NASA-CASE-NPO-14021-2] c27 N80-16163
FLEXIBLE WINGS
 Aeroflexible wing structure with air scoop for inflating stiffeners with ram air
 [NASA-CASE-XLA-06095] c01 N69-39981
 Deployment system for flexible wing with rigid superstructure
 [NASA-CASE-XLA-01220] c02 N70-41863
 Development and characteristics of control system for flexible wings
 [NASA-CASE-XLA-06958] c02 N71-11038
FLEXING
 Two degree inverted flexure from single block of material
 [NASA-CASE-ARC-10345-1] c15 N73-12488
 Pressure suit joint analyzer
 [NASA-CASE-ARC-11314-1] c54 N80-30043
FLIGHT
 Flow meter for measuring stagnation pressure in boundary layer around high speed flight vehicle
 [NASA-CASE-IFR-02007] c12 N71-24692
FLIGHT ALTITUDE
 Surface based altitude measuring system for accurately measuring altitude of airborne vehicle
 [NASA-CASE-ERC-10412-1] c09 N73-12211
 Terminal guidance system --- for guiding aircraft into preselected altitude and/or heading at terminal point
 [NASA-CASE-FRC-10049-1] c04 N74-13420

Apparatus for measuring an aircraft's speed and height
[NASA-CASE-LAR-12275-1] c35 N79-18296
Sidelooking laser altimeter for a flight simulator
[NASA-CASE-ARC-11312-1] c36 N81-19439

FLIGHT CONTROL
Aircraft indicator for pilot control of takeoff roll, climbout path and verticle flight path in poor visibility conditions
[NASA-CASE-XLA-00487] c14 N70-40157
Two axis flight controller with potentiometer control shafts directly coupled to rotatable ball members
[NASA-CASE-XFR-04104] c03 N70-42073
Development of aircraft control system with high performance electrically controlled and mechanically operated hydraulic valves for precise flight operation
[NASA-CASE-XAC-00048] c02 N71-29128
Development of flight simulator system to show position of joystick displacement
[NASA-CASE-NPO-11497] c08 N73-25206
Solid state controller three axes controller
[NASA-CASE-MSC-12394-1] c08 N74-10942
G-load measuring and indicator apparatus --- for aircraft
[NASA-CASE-ARC-10806] c06 N74-27872
Integrated lift/drag controller for aircraft
[NASA-CASE-ARC-10456-1] c05 N75-12930
Deploy/release system --- model aircraft flight control
[NASA-CASE-LAR-11575-1] c02 N76-16014
Apparatus for damping operator induced oscillations of a controlled system --- using adaptive filters to damp oscillations in a flight control system
[NASA-CASE-FRC-11041-1] c33 N80-20488
Aircraft body-axis rotation measurement system
[NASA-CASE-FRC-11043-1] c06 N81-22048

FLIGHT CREWS
Survival couch for aircraft or spacecraft crews
[NASA-CASE-XLA-00118] c05 N70-33285

FLIGHT HAZARDS
CAT altitude avoidance system
[NASA-CASE-NPO-15351-1] c47 N81-16677

FLIGHT RECORDERS
Event recorder with constant speed motor which rotates recording disk
[NASA-CASE-XLA-01832] c14 N71-21006

FLIGHT SAFETY
Aerial capsule emergency separation device using jettisonable towers
[NASA-CASE-XLA-00115] c03 N70-33343
Development and characteristics of electronic signalling system and data processing equipment for warning systems to avoid midair collisions between aircraft
[NASA-CASE-LAR-10717-1] c21 N73-30641

FLIGHT SIMULATION
Lunar landing flight research vehicle
[NASA-CASE-XFR-00929] c31 N70-34566
Television simulation for aircraft and space flight
[NASA-CASE-XFR-03107] c09 N71-19449
Electrical circuit selection device for simulating stage separation of flight vehicle
[NASA-CASE-XKS-04631] c10 N71-23663

FLIGHT SIMULATORS
Centrifuge mounted motion simulator with elevator mechanism
[NASA-CASE-XAC-00399] c11 N70-34815
Table structure and rotating magnet system simulating gravitational forces on spacecraft and displaying trajectories between Earth, Venus, and Mercury
[NASA-CASE-XNP-00708] c14 N70-35394
Wind tunnel test section for simulating high Reynolds number over transonic speed range
[NASA-CASE-MFS-20509] c11 N72-17183
Development of flight simulator system to show position of joystick displacement
[NASA-CASE-NPO-11497] c08 N73-25206
Apparatus for applying simulator g-forces to an arm of an aircraft simulator pilot
[NASA-CASE-LAR-10550-1] c09 N74-30597
Vehicle simulator binocular multiplanar visual display system
[NASA-CASE-ARC-10808-1] c09 N76-24280

Full color hybrid display for aircraft simulators --- landing aids
[NASA-CASE-ARC-10903-1] c09 N78-18083
Chromatically corrected virtual image display --- lens design for flight simulators
[NASA-CASE-LAR-12251-1] c74 N79-14892
Seat cushion to provide realistic acceleration cues to aircraft simulator pilot
[NASA-CASE-LAR-12149-2] c09 N79-31228
Chromatically corrected virtual image visual display --- reducing eye strain in flight simulators
[NASA-CASE-LAR-12251-1] c74 N80-27185
Sidelooking laser altimeter for a flight simulator
[NASA-CASE-ARC-11312-1] c36 N81-19439
Helmet weight simulator
[NASA-CASE-LAR-12320-1] c54 N81-27806
Biocentrifuge system capable of exchanging specimen cages while in operational mode
[NASA-CASE-MFS-23825-1] c51 N81-32829

FLIGHT TESTS
Device for measuring drag forces in flight tests
[NASA-CASE-XLA-00113] c14 N70-33386

FLIGHT VEHICLES
Construction of leading edges of surfaces for aerial vehicles performing from subsonic to above transonic speeds
[NASA-CASE-XLA-01486] c01 N71-23497
Electro-optical attitude sensing device for landing approach of flight vehicle
[NASA-CASE-XMS-01994-1] c14 N72-17326

FLIP-FLOPS
Bistable multivibrator circuits operating at high speed and low power dissipation
[NASA-CASE-XGS-00823] c10 N71-15910
Stepping motor control apparatus exciting windings in proper time sequence to cause motor to rotate in either direction
[NASA-CASE-GSC-10366-1] c10 N71-18772
Interrogator and current driver circuit for combination with transistor flip-flop circuit
[NASA-CASE-XGS-03058] c10 N71-19547

FLOATING
Floating baffle for tank drain
[NASA-CASE-KSC-10639] c15 N73-26472
Modification of one man life raft
[NASA-CASE-LAR-10241-1] c54 N74-14845
Floating nut retention system
[NASA-CASE-MSC-16938-1] c37 N80-23653

FLOATS
Magnetically centered liquid column float
[NASA-CASE-XAC-00030] c14 N70-34820

FLOTATION
Development and characteristics of rescue litter with inflatable flotation device for water rescue application
[NASA-CASE-XMS-04170] c05 N71-22748

FLOW CHAMBERS
Multi-chamber controllable heat pipe
[NASA-CASE-ARC-10199] c34 N78-17337

FLOW DIRECTION INDICATORS
Electric circuit for reversing direction of current flow
[NASA-CASE-XNP-00952] c10 N71-23271
Flow angle sensor and remote readout system for use with cryogenic fluids
[NASA-CASE-XLE-04503] c14 N71-24864

FLOW DISTRIBUTION
Multiple orifice fluid flow control valve to provide different flow patterns
[NASA-CASE-ERC-10208] c15 N70-10867
Photographing surface flow patterns on wind tunnel test models
[NASA-CASE-XLA-01353] c14 N70-41366
Color photointerpretation of interference colors reflected from thin film oil-coated components in moving gases for gas flow visualization
[NASA-CASE-XNP-01779] c12 N71-20815
Dual wavelength scanning Doppler velocimeter --- without perturbation of flow fields
[NASA-CASE-ARC-10637-1] c35 N75-16783
Controlled separation combustor --- airflow distribution in gas turbine engines
[NASA-CASE-LEW-11593-1] c20 N76-14190

FLOW MEASUREMENT
Collapsible flow test device for obstructed passages
[NASA-CASE-XMS-04917] c14 N69-24257

- Mass flow meter containing beta source for measuring nonpolar liquid flow
[NASA-CASE-MFS-20485] c14 N72-11365
- Instrument for measuring magnitude and direction of flow velocity in flow field
[NASA-CASE-LAR-16855-1] c14 N73-13415
- Flow measuring apparatus
[NASA-CASE-LEW-12078-1] c35 N75-30503
- Method for making a hot wire anemometer and product thereof
[NASA-CASE-ARC-10900-1] c35 N77-24454
- Fluid velocity measuring device
[NASA-CASE-LAR-11729-1] c34 N79-12359
- Biomedical flow sensor --- intravenous procedures
[NASA-CASE-MSC-18761-1] c52 N81-24717
- Automatic flowmeter calibration system
[NASA-CASE-KSC-11076-1] c34 N81-26402
- Aeroelastic instability stoppers for wind-tunnel models
[NASA-CASE-LAR-12720-1] c09 N81-31229
- FLOW REGULATORS**
- Antibacklash circuit for hydraulic drive system
[NASA-CASE-XNP-01020] c03 N71-12260
- Tubular flow restrictor for gas flow control in pipeline
[NASA-CASE-NPO-10117] c15 N71-15608
- Fluid flow control valve for regulating fluids in molecular quantities
[NASA-CASE-XLE-00703] c15 N71-15567
- Control of gas flow from pressurized vessel by thermal expansion of metal plug
[NASA-CASE-NPO-10298] c12 N71-17661
- Semitoroidal diaphragm cavitating flow control valve
[NASA-CASE-XNP-09704] c12 N71-18615
- Describing device for changing flow rate of fluid in duct in response to change in temperature
[NASA-CASE-MFS-14259] c15 N71-19213
- Pneumatic servoamplifier for controlling flow regulation
[NASA-CASE-MSC-12121-1] c15 N71-27147
- Gas flow control device, including housing and input port
[NASA-CASE-NPO-11479] c15 N73-13462
- Pressure modulating valve
[NASA-CASE-MSC-14905-1] c37 N77-28467
- Automotive gas turbine fuel control
[NASA-CASE-LEW-12785-1] c37 N78-24545
- Flow diverter valve and flow diversion method
[NASA-CASE-HQN-00573-1] c37 N79-33468
- Automatic thermal switch --- Space Shuttle equipment bay temperature control
[NASA-CASE-GSC-12415-1] c34 N80-18338
- Biomedical flow sensor --- intravenous procedures
[NASA-CASE-MSC-18761-1] c52 N81-24717
- FLOW STABILITY**
- Detonation reaction engine comprising outer housing enclosing pair of inner walls for continuous flow
[NASA-CASE-XNP-06926] c28 N71-22583
- Apparatus for establishing flow of a fluid mass having a known velocity
[NASA-CASE-MFS-21424-1] c34 N74-27730
- Aeroelastic instability stoppers for wind-tunnel models
[NASA-CASE-LAR-12720-1] c09 N81-31229
- FLOW VELOCITY**
- Continuous variation of propellant flow and thrust by application of liquid foam flow theory to injection orifice
[NASA-CASE-XLE-00177] c28 N70-40367
- Measuring density of single and two-phase cryogenic fluids in rocket fuel tanks
[NASA-CASE-XLE-00688] c14 N70-41330
- Device for adding water to high velocity exhaust jets to reduce velocity, noise, and temperature
[NASA-CASE-XNP-01813] c28 N70-41582
- Positive displacement flowmeter for measuring extremely low flows of fluid with self-calibrating features
[NASA-CASE-XNP-02822] c14 N70-41994
- Zeta potential flowmeter for measuring very slow to very high flows
[NASA-CASE-XNP-06509] c14 N71-23226
- Device for simultaneously determining density, velocity, and temperature of streaming gas
[NASA-CASE-XLA-03375] c16 N71-24074
- Doppler shifted laser beam as fluid velocity sensor
[NASA-CASE-XAC-10770-1] c16 N71-24828
- Flowmeters for sensing low fluid flow rate and pressure for application to respiration rate studies
[NASA-CASE-FRC-10022] c12 N71-26546
- Force balanced throttle valve for fuel control in rocket engines
[NASA-CASE-NPO-10808] c15 N71-27432
- Flow rate switch for detecting variations in fluid flow velocity through conduits of pressurized systems
[NASA-CASE-NPO-10722] c09 N72-20199
- Instrument for measuring magnitude and direction of flow velocity in flow field
[NASA-CASE-LAR-10855-1] c14 N73-13415
- Apparatus for establishing flow of a fluid mass having a known velocity
[NASA-CASE-MFS-21424-1] c34 N74-27730
- Wind tunnel flow generation section
[NASA-CASE-ARC-10710-1] c09 N75-12969
- Combined dual scatter, local oscillator laser Doppler velocimeter
[NASA-CASE-ARC-10642-1] c36 N76-14447
- System for measuring three fluctuating velocity components in a turbulently flowing fluid
[NASA-CASE-ARC-10974-1] c34 N77-27345
- Fluid velocity measuring device
[NASA-CASE-LAR-11729-1] c34 N79-12359
- Pressure letdown method and device for coal conversion systems
[NASA-CASE-NPO-15100-1] c28 N81-33306
- FLOW VISUALIZATION**
- Method and apparatus for measuring shock layer radiation distribution about high velocity objects
[NASA-CASE-XAC-02970] c14 N69-39896
- Color photointerpretation of interference colors reflected from thin film oil-coated components in moving gases for gas flow visualization
[NASA-CASE-XNP-01779] c12 N71-20815
- FLOWMETERS**
- Collapsible flow test device for obstructed passages
[NASA-CASE-XNS-04917] c14 N69-24257
- Positive displacement flowmeter for measuring extremely low flows of fluid with self-calibrating features
[NASA-CASE-XNP-02822] c14 N70-41994
- Heated element sensor for fluid flow detection in thermal conductive conduit with adaptive means to determine flow rate and direction
[NASA-CASE-MSC-12084-1] c12 N71-17569
- Describing laser Doppler velocimeter for measuring mean velocity and turbulence of fluid flow
[NASA-CASE-MFS-20386] c21 N71-19212
- Zeta potential flowmeter for measuring very slow to very high flows
[NASA-CASE-XNP-06509] c14 N71-23226
- Flow meter for measuring stagnation pressure in boundary layer around high speed flight vehicle
[NASA-CASE-XPR-02007] c12 N71-24692
- Doppler shifted laser beam as fluid velocity sensor
[NASA-CASE-XAC-10770-1] c16 N71-24828
- Flowmeters for sensing low fluid flow rate and pressure for application to respiration rate studies
[NASA-CASE-FRC-10022] c12 N71-26546
- Mass flow meter containing beta source for measuring nonpolar liquid flow
[NASA-CASE-MFS-20485] c14 N72-11365
- Respiratory analysis system to determine gas flow rate and frequency of respiration and expiration cycles in real time
[NASA-CASE-MSC-13436-1] c05 N73-32015
- Low power electromagnetic flowmeter system producing zero output signal for zero flow
[NASA-CASE-AEC-10362-1] c14 N73-32326
- Electromagnetic flow rate meter --- for liquid metals
[NASA-CASE-LEW-10981-1] c35 N74-21018
- Leak detector
[NASA-CASE-MFS-21761-1] c35 N75-15931
- System for measuring three fluctuating velocity components in a turbulently flowing fluid
[NASA-CASE-ARC-10974-1] c34 N77-27345

Automatic flowmeter calibration system
[NASA-CASE-KSC-11076-1] c34 N81-26402

FLUID AMPLIFIERS

Fluid jet amplifier with fluid from jet nozzle deflected by inlet pressure
[NASA-CASE-XLE-03512] c12 N69-21466

Multiple vortex amplifier system as fluid valve
[NASA-CASE-XMP-04709] c15 N71-15609

Shear modulated fluid amplifier of high pressure hydraulic vortex amplifier type
[NASA-CASE-MFS-10412] c12 N71-17578

Development of vortex fluid amplifier for throttling rocket exhaust
[NASA-CASE-LEW-10374-1] c28 N73-13773

Fluid pressure amplifier and system
[NASA-CASE-LAR-10868-1] c33 N74-11050

Fluid thrust control system --- for liquid propellant rocket engines
[NASA-CASE-XMP-05964-1] c20 N79-21124

FLUID FILMS

Journal bearings --- for lubricant films
[NASA-CASE-LEW-11076-1] c37 N74-21061

Fluid journal bearings
[NASA-CASE-LEW-11076-4] c37 N76-15461

Fluid seal for rotating shafts
[NASA-CASE-LEW-11676-1] c37 N76-22541

FLUID FILTERS

Absorbent apparatus for separating gas from liquid-gas stream used in environmental control under zero gravity conditions
[NASA-CASE-XMS-01492] c05 N70-41297

Compact high pressure filter for rocket fuel lines
[NASA-CASE-XMP-00732] c28 N70-41447

Development of liquid separating system using capillary device connected to flexible bladder storage chamber
[NASA-CASE-XMS-13052] c14 N71-20427

Fluid control apparatus and method
[NASA-CASE-LAR-11110-1] c34 N75-26282

Filter regeneration systems --- a system for regenerating a system filter in a fluid flow line
[NASA-CASE-MSC-14273-1] c34 N75-33342

Quick disconnect filter coupling
[NASA-CASE-MFS-22323-1] c37 N76-14463

Rapid, quantitative determination of bacteria in water
[NASA-CASE-GSC-12158-1] c51 N78-22585

Fluid sample collection and distribution system --- qualitative analysis of aqueous samples from several points
[NASA-CASE-MSC-16841-1] c34 N79-24285

FLUID FLOW

Fluid jet amplifier with fluid from jet nozzle deflected by inlet pressure
[NASA-CASE-XLE-03512] c12 N69-21466

Pneumatic system for cyclic control of fluid flow in pneumatic device
[NASA-CASE-XMS-04843] c03 N69-21469

Multiple orifice fluid flow control valve to provide different flow patterns
[NASA-CASE-ERC-10208] c15 N70-10867

Conical valve plug for use with reactive cryogenic fluids
[NASA-CASE-XLE-00715] c15 N70-34859

Pressure regulating system with high pressure fluid source, adapted to maintain constant downstream pressure
[NASA-CASE-XMP-00450] c15 N70-38603

Antiflutter check valve for use with high pressure fluid flow
[NASA-CASE-XMP-01152] c15 N70-41611

Inductive liquid level detection system
[NASA-CASE-XLE-01609] c14 N71-10500

Multiple vortex amplifier system as fluid valve
[NASA-CASE-XMP-04709] c15 N71-15609

Heated element sensor for fluid flow detection in thermal conductive conduit with adaptive means to determine flow rate and direction
[NASA-CASE-MSC-12084-1] c12 N71-17569

Throttle valve for regulating fluid flow volume
[NASA-CASE-XMP-05698] c15 N71-18580

Photometric flow meter with comparator reference means
[NASA-CASE-XGS-01331] c14 N71-22996

Combination pressure transducer-calibrator assembly for measuring fluid
[NASA-CASE-XMP-01660] c14 N71-23036

Valve assembly for controlling simultaneously more than one fluid flow, and having stable qualities under loads
[NASA-CASE-XMS-05890] c09 N71-23191

Flowmeters for sensing low fluid flow rate and pressure for application to respiration rate studies
[NASA-CASE-FRC-10022] c12 N71-26546

Control valve for switching main stream of fluid from one stable position to another by means of electrohydrodynamic forces
[NASA-CASE-NPO-10416] c12 N71-27332

Fluid control jet amplifiers
[NASA-CASE-XLE-09341] c12 N71-28741

Mass flow meter containing beta source for measuring nonpolar liquid flow
[NASA-CASE-MFS-20485] c14 N72-11365

Flow rate switch for detecting variations in fluid flow velocity through conduits of pressurized systems
[NASA-CASE-NFO-10722] c09 N72-20199

Torsional disconnect device for releasably coupling distal ends of fluid conduits
[NASA-CASE-NPO-10704] c15 N72-20445

Capacitive tank gaging device for monitoring one constituent of two phase fluid by sensing dielectric constant
[NASA-CASE-MFS-21629] c14 N72-22442

Transferring liquid nitrogen through vacuum chamber to cryopanel
[NASA-CASE-LAR-10031] c15 N72-22484

Design and development of device to prevent geysering during convective circulation of cryogenic fluids
[NASA-CASE-KSC-10615] c15 N73-12486

Design and development of thermomechanical pump for transmitting warming fluid through fluid circuit to control temperature of spacecraft instrumentation
[NASA-CASE-NFO-11417] c15 N73-24513

Flow control valve --- for high temperature fluids
[NASA-CASE-NPO-11951-1] c37 N74-21065

Apparatus for establishing flow of a fluid mass having a known velocity
[NASA-CASE-MFS-21424-1] c34 N74-27730

Internally supported flexible duct joint --- device for conducting fluids in high pressure systems
[NASA-CASE-MFS-19193-1] c37 N75-19686

Flow measuring apparatus
[NASA-CASE-LEW-12078-1] c35 N75-30503

Filter regeneration systems --- a system for regenerating a system filter in a fluid flow line
[NASA-CASE-MSC-14273-1] c34 N75-33342

Combined dual scatter, local oscillator laser Doppler velocimeter
[NASA-CASE-ARC-10642-1] c36 N76-14447

Externally supported internally stabilized flexible duct joint
[NASA-CASE-MFS-19194-1] c37 N76-14460

Vortex generator for controlling the dispersion of effluents in a flowing liquid
[NASA-CASE-LAR-12045-1] c34 N77-24423

Pseudo-backscatter laser Doppler velocimeter employing antiparallel-reflector in the forward direction
[NASA-CASE-ARC-10970-1] c36 N77-25501

Accumulator
[NASA-CASE-MFS-19287-1] c34 N77-30399

Apparatus for measuring a sorbate dispersed in a fluid stream
[NASA-CASE-ARC-10896-1] c35 N78-19465

Flow compensating pressure regulator
[NASA-CASE-LEW-12718-1] c34 N78-25351

Fluid valve assembly
[NASA-CASE-MSC-12731-1] c37 N78-25426

Positive isolation disconnect
[NASA-CASE-MSC-16043-1] c37 N79-11402

Fluid velocity measuring device
[NASA-CASE-LAR-11729-1] c34 N79-12359

Hot foil transducer skin friction sensor
[NASA-CASE-LAR-12321-1] c35 N81-12390

Dual laser optical system and method for studying fluid flow
[NASA-CASE-MFS-25315-1] c36 N81-19440

FLUID INJECTION

Solid propellant ignition with hypergolic fluid injected to predetermined portions of propellant

- [NASA-CASE-XLE-00207] c28 N70-33375
Method for igniting solid propellant rocket motors by injecting hypergolic fluids
[NASA-CASE-XLE-01988] c27 N71-15634
Constructing fluid spike nozzle to eliminate heat transfer and high temperature problems inherent in physical spikes
[NASA-CASE-XGS-01143] c31 N71-15647
Method and apparatus for producing fine particles in cryogenic liquid bath for gelled rocket propellants
[NASA-CASE-NPO-10250] c23 N71-16212
Fluid transferring system design for purging toxic, corrosive, or noxious fluids and fumes from materials handling equipment for cleansing and accident prevention
[NASA-CASE-XMS-01905] c12 N71-21089
Tertiary flow injection system for thrust vectoring of propulsive nozzle flow
[NASA-CASE-MPS-20831] c28 N71-29153
Programmable physiological infusion
[NASA-CASE-ARC-10447-1] c52 N74-22771
- FLUID JETS**
Directed fluid stream for propeller blade loading control
[NASA-CASE-XAC-00139] c02 N70-34856
- FLUID LOGIC**
Logic AND gate for fluid circuits
[NASA-CASE-XLA-07391] c12 N71-17579
- FLUID MECHANICS**
Fluid leakage detection system with automatic monitoring capability
[NASA-CASE-LAR-10323-1] c12 N71-17573
Development and characteristics of parallel plate viscometer for determination of absolute viscosity of liquids and viscoelastic materials
[NASA-CASE-NPO-11387] c14 N73-14429
- FLUID POWER**
Fluid power transmission and gas bearing system
[NASA-CASE-XMS-01445] c12 N71-16031
Low friction gas bearing system for fluid power transmission to bearing-supported payload
[NASA-CASE-ERC-10097] c15 N71-28465
- FLUID PRESSURE**
Flow compensating pressure regulator
[NASA-CASE-LEW-12748-1] c34 N78-25351
Self-stabilizing radial face seal
[NASA-CASE-LEW-12991-1] c37 N81-24442
- FLUID ROTOR GYROSCOPES**
Piezoelectric pump for supplying fluid at high frequencies to gyroscope fluid suspension system
[NASA-CASE-XNP-05429] c26 N71-21824
- FLUID SWITCHING ELEMENTS**
Two phase fluid pressurization system for propellant tank
[NASA-CASE-MSC-12390] c27 N71-29155
- FLUID TRANSMISSION LINES**
Low heat leak connector for cryogenic system
[NASA-CASE-XLE-02367-1] c31 N79-21225
- FLUIDIC CIRCUITS**
Using molds for fabricating individual fluid circuit components
[NASA-CASE-XLA-07829] c15 N72-16329
Flow measuring apparatus
[NASA-CASE-LEW-12078-1] c35 N75-30503
- FLUIDICS**
Fluidic-thermochromic display device
[NASA-CASE-ERC-10031] c12 N71-18603
Plasma-fluidic hybrid display system combining high brightness and memory characteristics
[NASA-CASE-ERC-10100] c09 N71-33519
Continuous gas flow control by fluidic proportional thruster system
[NASA-CASE-ARC-10106-1] c28 N72-22769
Fluid pressure amplifier and system
[NASA-CASE-LAR-10868-1] c33 N74-11050
Fluid valve assembly
[NASA-CASE-MSC-12731-1] c37 N78-25426
- FLUIDIZED BED PROCESSORS**
Use of glow discharge in fluidized beds
[NASA-CASE-ARC-11245-1] c33 N80-11326
Solar-heated fluidized bed gasification system
[NASA-CASE-NPO-15071-1] c44 N80-24747
Continuous coal processing method
[NASA-CASE-NPO-13758-2] c31 N81-15154
- FLUIDS**
Automated fluid chemical analyzer for microchemical analysis of small quantities of liquids by use of selected reagents and analyzer units
[NASA-CASE-XNP-09451] c06 N71-26754
Detection of bacteria in biological fluids and foods
[NASA-CASE-GSC-11533-1] c14 N73-13435
Fluid polydimethylsiloxane resin with low outgassing properties in cured state
[NASA-CASE-GSC-11358-1] c06 N73-26100
Fluid mass sensor for a zero gravity environment
[NASA-CASE-MSC-14653-1] c35 N77-19385
- FLUORESCENCE**
Spectrophotofluorometer with 3-dimensional display to identify fluorescence spectra of carcinogenic and noncarcinogenic hydrocarbons
[NASA-CASE-XGS-01231] c14 N70-41676
Sealed fluorescent tube light unit capable of connection with other units to form string of work lights
[NASA-CASE-XKS-05932] c09 N71-26787
Chromato-fluorographic drug detector --- device for detecting and recording fluorescent properties of materials
[NASA-CASE-ARC-10633-1] c25 N74-26947
Fluorescence detector for monitoring atmospheric pollutants
[NASA-CASE-NPO-13231-1] c45 N75-27585
Fluorescent radiation converter
[NASA-CASE-GSC-12528-1] c74 N81-24900
- FLUORIDES**
Self lubricating fluoride-metal composite materials for outer space applications
[NASA-CASE-XLE-08511] c18 N71-23710
Development of fluoride coating to prevent oxidation of beryllium surfaces at elevated temperatures
[NASA-CASE-LEW-10327] c17 N71-33408
Perfluoro polyether acyl fluorides
[NASA-CASE-NPO-10765] c06 N72-20121
- FLUORINATION**
Fluorinated polyurethanes produced by reacting hydroxy terminated perfluoro polyether with diisocyanate
[NASA-CASE-NPO-10767-2] c06 N72-27151
Fluorinated esters of polycarboxylic acid and lubricating compositions for use at extreme temperature
[NASA-CASE-MPS-21040-1] c06 N73-30098
- FLUORINE**
Reaction of polyperfluoropolyenes with fluorine to produce saturated polymer chain or create reactive sites on chain
[NASA-CASE-NPO-10862] c06 N72-22107
Process for the preparation of fluorine containing crosslinked elastomeric polytriazine and product so produced
[NASA-CASE-ARC-11248-1] c27 N81-17259
- FLUORINE COMPOUNDS**
Fluorine-containing polyformals
[NASA-CASE-XNP-06900-1] c27 N79-21191
- FLUORO COMPOUNDS**
Synthesis of polyfluorobutadiene by polymerization of perfluorobutadiene with diisopropyl peroxydicarbonate
[NASA-CASE-NPO-10863] c06 N70-11251
Low pressure perfluorobutadiene polymerization with peroxide catalysts
[NASA-CASE-NPO-10447] c06 N70-11252
Preparation of fluorohydroxy ethers by reacting fluoroalkylene oxides with alkali salt of polyfluoroalkylene diol
[NASA-CASE-MPS-10507] c06 N73-30101
Preparation of fluorinated polyethers from 2-hydro-perhaloisopropyl alcohols
[NASA-CASE-MPS-11492] c06 N73-30102
Chemical and elastic properties of fluorinated polyurethanes
[NASA-CASE-NPO-10767-1] c06 N73-33076
Utilization of oxygen difluoride for syntheses of fluoropolymers
[NASA-CASE-NPO-12061-1] c27 N76-16228
Synthesis of multifunction triaryltrifluoroethanes
[NASA-CASE-ARC-11097-1] c23 N78-22154
Synthesis of multifunction triaryltrifluoroethanes
[NASA-CASE-ARC-11097-2] c23 N78-22155
- FLUOROCARBONS**
Electrically conductive fluorocarbon polymers
[NASA-CASE-XLE-06774-2] c06 N72-25150
- FLUOROPOLYMERS**
Perfluoroalkyl polytriazines containing pendent

iododifluoromethyl groups
[NASA-CASE-ARC-11241-1] c25 N81-14016
Texturing polymer surfaces by transfer casting
--- cardiovascular prosthesis
[NASA-CASE-LEW-13120-1] c31 N81-16327

FLUTTER
Antiflutter check valve for use with high pressure fluid flow
[NASA-CASE-XNP-01152] c15 N70-41811
Development of aerodynamic control system to control flutter over large range of oscillatory frequencies using stability augmentation techniques
[NASA-CASE-LAR-10682-1] c02 N73-26004
Decoupler pylon: Wing/store flutter suppressor
[NASA-CASE-LAR-12468-1] c08 N80-22359

FLUX (RATE)
Fluxgate magnetometer for measuring magnetic field along two axes using one sensor
[NASA-CASE-GSC-10441-1] c14 N71-27325

FLUX DENSITY
Particle beam power density detection and measurement apparatus
[NASA-CASE-XLE-00243] c14 N70-38602

FLUXES
Hydrazine monoperfluoro alkanoate solder flux leaving corrosion resistant coating, for metals such as copper
[NASA-CASE-XNP-03459-2] c18 N71-15688
Metal soldering with hydrazine monoperfluoro alkanoate for corrosion resistant coatings
[NASA-CASE-XNP-03459] c15 N71-21078

FLYWHEELS
Energy storage apparatus
[NASA-CASE-GSC-12030-1] c44 N78-24608
Rotatable mass for a flywheel
[NASA-CASE-MFS-23051-1] c37 N79-10422
Safety flywheel --- using flexible materials energy storage
[NASA-CASE-HQN-10888-1] c44 N79-14527
Method of manufacture of bonded fiber flywheel --- fiberglass-epoxy
[NASA-CASE-MFS-23674-1] c24 N81-29163

FOAMS
Plastic foam generator for space vehicle instrument payload package flotation in water landing
[NASA-CASE-XLA-00838] c03 N70-36778
Continuous variation of propellant flow and thrust by application of liquid foam flow theory to injection orifice
[NASA-CASE-XLE-00177] c28 N70-40367
Development of foam insulation for filament wound cryogenic storage tank
[NASA-CASE-XLE-03803] c15 N71-23816
Carboxyl terminated polyester prepolymers and foams produced from prepolymers and materials
[NASA-CASE-NPO-10596] c06 N71-25929
Storage stable, thermally activated foaming compositions for erecting and rigidizing mechanisms of thin sheet solar collectors
[NASA-CASE-LAR-10373-1] c18 N71-26155
Method of making solid propellant rocket motor having reliable high altitude capabilities, long shelf life, and capable of firing with nozzle closure with foamed plastic permanent mandrel
[NASA-CASE-XLA-04126] c28 N71-26779
Foam insulation thickness measuring and injection device for spacecraft applications
[NASA-CASE-MFS-20261] c14 N71-27005
Description of method for making homogeneous foamed materials in weightless environment using materials having different physical properties
[NASA-CASE-XMP-09902] c15 N72-11387
Polyimide foam for the thermal insulation and fire protection
[NASA-CASE-ARC-10464-1] c27 N74-12812
Intumescent composition, foamed product prepared therewith and process for making same
[NASA-CASE-ARC-10304-2] c27 N74-27037
Polymeric foams from cross-linkable poly-n-arylenebenzimidazoles
[NASA-CASE-ARC-11008-1] c27 N78-31232
Ambient cure polyimide foams --- thermal resistant foams
[NASA-CASE-ARC-11170-1] c27 N79-11215

Catalysts for polyimide foams from aromatic isocyanates and aromatic dianhydrides --- flame retardant foams
[NASA-CASE-ARC-11107-1] c25 N80-16116

FOCUSING

X ray collimating structure for focusing radiation directly onto detector
[NASA-CASE-XHQ-04106] c14 N70-40240
Apertured electrode focusing system for ion sources with nonuniform plasma density
[NASA-CASE-XNP-03332] c09 N71-10618
Development and characteristics of Petzval type objective including field shaping lens for focusing light of specified wavelength band on curved photoreceptor
[NASA-CASE-GSC-10700] c23 N71-30027
Absolute focus locking device for microscopes to maintain set focus for extended time period
[NASA-CASE-LAR-10184] c14 N72-22445
Electron beam controller --- using magnetic field to refocus spent electron beam in microwave oscillator tube
[NASA-CASE-LEW-11617-1] c33 N74-10195
Automatic focus control for facsimile cameras
[NASA-CASE-LAR-11213-1] c35 N75-15014
Multiplate focusing collimator --- for scanning small near radiation sources
[NASA-CASE-MFS-20932-1] c35 N75-19616
RF beam center location method and apparatus for power transmission system
[NASA-CASE-NFO-13821-1] c44 N78-28594
Gyrotion transmitting tube
[NASA-CASE-LEW-13429-1] c33 N81-16384

FOG

Anti-fog composition --- for prevention of fogging on surfaces such as space helmet visors and windshields
[NASA-CASE-MSC-13530-2] c23 N75-14834
Environmental fog/rain visual display system for aircraft simulators
[NASA-CASE-ARC-11158-1] c09 N79-33220

FOILS (MATERIALS)

Foil seal between parts moving relative to each other
[NASA-CASE-XLE-05130] c15 N69-21362
Method of making an insulation foil
[NASA-CASE-LEW-11484-1] c24 N75-33181
Partial interlaminar separation system for composites
[NASA-CASE-LAR-12065-1] c24 N81-14000
Method of making a partial interlaminar separation composite system
[NASA-CASE-LAR-12065-2] c24 N81-33235

FOLDING

Characteristics of device for folding thin flexible sheets into compact configuration
[NASA-CASE-XLA-00137] c15 N70-33180

FOLDING STRUCTURES

Lenticular vehicle with foldable aerodynamic control flaps and reaction jets for operation above and within earth's atmosphere
[NASA-CASE-XGS-00260] c31 N70-37924
Collapsible, space erectable loop antenna system for space vehicle
[NASA-CASE-XMP-00437] c07 N70-40202
Unfolding boom assembly with knuckle joints for positioning equipment for spacecraft
[NASA-CASE-XGS-00938] c32 N70-41367
Foldable conduit capable of springing back as self erecting structural member
[NASA-CASE-XLE-00620] c32 N70-41579
Foldable, double cone and parabolic reflector system for solar ray concentration
[NASA-CASE-XLA-04622] c03 N70-41580
Method for deployment of flexible wing glider from space vehicle with minimum impact and loading
[NASA-CASE-XMS-00907] c02 N70-41630
Development and characteristics of variable sweep wing control system for supersonic aircraft
[NASA-CASE-XLA-03659] c02 N71-11041
Hydraulic actuator design for space deployment of heat radiators
[NASA-CASE-MSC-11817-1] c15 N71-26611
Apparatus and method of assembling building blocks by folding pre-cut flat sheets of material during on-site construction
[NASA-CASE-MSC-12233-1] c15 N72-25454

- Folding structure fabricated of rigid panels
[NASA-CASE-XHQ-02146] c18 N75-27040
- Collapsible corrugated horn antenna
[NASA-CASE-LAR-11745-1] c32 N80-29539
- Foldable beam
[NASA-CASE-LAR-12077-1] c31 N81-25259
- Telescoping columns --- parabolic antenna support
[NASA-CASE-LAR-12195-1] c31 N81-27324
- FOOD**
Detection of bacteria in biological fluids and foods
[NASA-CASE-GSC-11533-1] c14 N73-13435
- FORCE**
Electromechanical actuator for producing mechanical force and/or motion in response to electrical signals
[NASA-CASE-NPO-11738-1] c09 N73-30185
- FORCE DISTRIBUTION**
Device for handling heavy loads by distributing forces
[NASA-CASE-XNP-04969] c11 N69-27466
- Development of two force component measuring device
[NASA-CASE-XAC-04886-1] c14 N71-20439
- Tensile strength testing device having pulley guides for exerting multiple forces on test specimen
[NASA-CASE-XNP-05634] c15 N71-24834
- Development and characteristics of device for indicating and recording magnitude of force applied in axial direction
[NASA-CASE-MSC-15626-1] c14 N72-25411
- Variable direction force coupler for transmitting force along selectable curve path
[NASA-CASE-MFS-20317] c15 N73-13463
- Subminiature insertable force transducer --- including a strain gage to measure forces in muscles
[NASA-CASE-NPO-13423-1] c33 N75-31329
- FORCED VIBRATION**
Seismic vibration source
[NASA-CASE-NPO-14112-1] c46 N79-22679
- FOREBODIES**
Aerodynamic side-force alleviator means
[NASA-CASE-LAR-12326-1] c02 N81-14568
- FORMALDEHYDE**
An improved synthesis of 2, 4, 8, 10-tetroxaspiro (5.5)undecane
[NASA-CASE-ARC-11243-1] c27 N79-30375
- An improved synthesis of 2,4,8,10-tetroxaspiro (5.5) undecane
[NASA-CASE-ARC-11243-2] c23 N80-31472
- FORMAT**
Digital data reformatter/deserializer
[NASA-CASE-NPO-13676-1] c60 N79-20751
- FORMATES**
Preparation of polyurethane polymer by reacting hydroxy polyformal with organic diisocyanate
[NASA-CASE-MFS-10509] c06 N73-30103
- FORMING TECHNIQUES**
Apparatus for forming wire grids for electric strain gages
[NASA-CASE-XLE-00023] c15 N70-33330
- Not forming of plastic sheets
[NASA-CASE-XMS-05516] c15 N71-17803
- Forming tubes from long thin flat metal strips
[NASA-CASE-IGS-04175] c15 N71-18579
- Portable magnetomotive hammer for metal working
[NASA-CASE-XMF-03793] c15 N71-24833
- Forming mold for polishing and machining curved solar magnesium reflector with reinforcing ribs
[NASA-CASE-XLE-08917-2] c15 N71-24836
- Heat treatment and tooling for forming shapes from thermosetting honeycomb core sheets
[NASA-CASE-NPO-11036] c15 N72-24522
- Method of heat treating a formed powder product material
[NASA-CASE-LEW-10805-3] c26 N74-10521
- Molding apparatus --- for thermosetting plastic compositions
[NASA-CASE-LAR-10489-2] c31 N74-32920
- Process for making sheets with parallel pores of uniform size
[NASA-CASE-GSC-10984-1] c37 N75-26371
- Drilled ball bearing with a one piece anti-tipping cage assembly
[NASA-CASE-LEW-11925-1] c37 N75-31446
- Apparatus for forming dished ion thruster grids
[NASA-CASE-LEW-11694-2] c37 N76-14461
- Acoustic energy shaping
[NASA-CASE-NPO-13802-1] c71 N78-10837
- Method of forming metal hydride films
[NASA-CASE-LEW-12083-1] c37 N78-13436
- Method of producing complex aluminum alloy parts of high temper, and products thereof
[NASA-CASE-MSC-19693-1] c26 N78-24333
- Solar cell with improved N-region contact and method of forming the same
[NASA-CASE-NPO-14205-1] c44 N79-31752
- Precision heat forming of tetrafluoroethylene tubing
[NASA-CASE-MSC-18430-1] c31 N80-17292
- Method and apparatus for producing concentric hollow spheres --- inertial confinement fusion targets
[NASA-CASE-NPO-14596-1] c31 N81-33319
- FORWARD SCATTERING**
Forward-scatter polarimeter for determining the gaseous depolarization factor in the presence of polluting polydispersed particles
[NASA-CASE-NPO-13756-1] c35 N76-14434
- FOUNDATIONS**
Base support for expansible and contractible coupling between two members
[NASA-CASE-NPO-11059] c15 N72-17454
- Adjustable securing base
[NASA-CASE-MSC-19666-1] c37 N78-17383
- FOURIER TRANSFORMATION**
Continuous Fourier transform method and apparatus --- for the analysis of simultaneous analog signal components
[NASA-CASE-ARC-10466-1] c60 N75-13539
- FRACTIONATION**
Purification apparatus for vaporization and fractional distillation of liquids
[NASA-CASE-XNP-08124] c15 N71-27184
- Electrophoretic fractional elution apparatus employing a rotational seal fraction collector
[NASA-CASE-MFS-23284-1] c37 N80-14397
- Electrophoresis device
[NASA-CASE-MFS-25426-1] c25 N81-29179
- FRACTURE MECHANICS**
Apparatus for testing metallic and nonmetallic beams or rods by bending at high temperatures in vacuum or inert atmosphere
[NASA-CASE-XLE-01300] c15 N70-41993
- FRACTURE STRENGTH**
High toughness-high strength iron alloy
[NASA-CASE-LEW-12542-1] c26 N77-24254
- Process for making a high toughness-high strength iron alloy
[NASA-CASE-LEW-12542-2] c26 N79-22271
- High toughness-high strength iron alloy
[NASA-CASE-LEW-12542-3] c26 N80-32484
- Method of making a partial interlaminar separation composite system
[NASA-CASE-LAR-12065-2] c24 N81-33235
- FRAME PHOTOGRAPHY**
Film advance indicator
[NASA-CASE-LAR-12474-1] c35 N80-31774
- FRAMES**
Shock absorbing articulated multiple couch assembly
[NASA-CASE-MSC-11253] c05 N71-12343
- Pliable frame for sunglasses in emergency survival kits
[NASA-CASE-XMS-06064] c05 N71-23096
- Expandable space frames with high expansion to collapse ratio
[NASA-CASE-ERC-10365-1] c31 N73-32749
- Laser measuring system for incremental assemblies --- measuring wire-wrapped frame assemblies in spark chambers
[NASA-CASE-GSC-12321-1] c36 N80-18380
- Inorganic spark chamber frame and method of making the same
[NASA-CASE-GSC-12354-1] c35 N80-20565
- FRAMING CAMERAS**
High speed photo-optical time recorder for indicating time at exposure of each frame of high speed movie camera film
[NASA-CASE-KSC-10294] c14 N72-18411
- FREE FLIGHT TEST APPARATUS**
Hydraulic support equipment for full scale dynamic testing of large rocket vehicle under free flight conditions
[NASA-CASE-XMF-01772] c11 N70-41677

Hydraulic support apparatus for dynamic testing of space vehicles under near-free flight conditions
[NASA-CASE-XMF-03248] c11 N71-10604

Free flight suspension system for use with aircraft models in wind tunnel tests
[NASA-CASE-XLA-00939] c11 N71-15526

FREE WING AIRCRAFT

Free wing assembly for an aircraft
[NASA-CASE-FRC-10092-1] c05 N79-12061

FREEZE DRYING

Rice preparation process consisting of cooking, two freezing-thawing cycles, and then freeze drying
[NASA-CASE-MSC-13540-1] c05 N72-33096

FREEZING

System for and method of freezing biological tissue
[NASA-CASE-GSC-12173-1] c51 N79-10694

Method of forming frozen spheres in a force-free drop tower --- microballoons for inertial confinement fusion
[NASA-CASE-NPO-14845-1] c31 N81-16328

FREON

Solar energy power system --- using Freon
[NASA-CASE-MFS-21628-1] c44 N75-32581

FREQUENCIES

Controlled oscillator system with a time dependent output frequency
[NASA-CASE-NPO-11962-1] c33 N74-10194

High efficiency multifrequency feed
[NASA-CASE-GSC-11909] c32 N74-20863

FREQUENCY ANALYZERS

Describing frequency discriminator using digital logic circuits and supplying single binary output signal
[NASA-CASE-MFS-14322] c08 N71-18692

Broadband frequency discriminator with resistive captive inductive networks
[NASA-CASE-NPO-10096] c07 N71-24583

Audio frequency analysis circuit for determining, displaying, and recording frequency of sweeping audio frequency signal
[NASA-CASE-NPO-11147] c14 N72-27408

Continuous Fourier transform method and apparatus --- for the analysis of simultaneous analog signal components
[NASA-CASE-ARC-10466-1] c60 N75-13539

Frequency discriminator and phase detector circuit
[NASA-CASE-NPO-11515-1] c33 N77-13315

Frequency tracked pulse technique for ultrasonic analysis
[NASA-CASE-LAR-12697-1] c32 N80-26571

FREQUENCY CONTROL

Automatic control of voltage supply to direct current motor
[NASA-CASE-XMS-04215-1] c09 N69-39587

Variable frequency magnetic coupled multivibrator with temperature compensated frequency control circuit
[NASA-CASE-XGS-00458] c09 N70-38604

Variable frequency magnetic coupled multivibrator with output signal of constant amplitude and waveform
[NASA-CASE-XGS-00131] c09 N70-38595

Development of automatic frequency discriminators and control for phase lock loop providing frequency preset capabilities
[NASA-CASE-XMF-08665] c10 N71-19467

Linear accelerator frequency control system
[NASA-CASE-XGS-05441] c10 N71-22962

Tuning arrangement for frequency control of magnetron-type electron discharge device
[NASA-CASE-XNP-09771] c09 N71-24841

Low loss dichroic plate
[NASA-CASE-NPO-13171-1] c32 N74-11000

Automatic frequency control for FM transmitter
[NASA-CASE-MFS-21540-1] c32 N74-19790

Acoustically controlled distributed feedback laser
[NASA-CASE-NPO-13175-1] c36 N75-31427

Reflex feed system for dual frequency antenna with frequency cutoff means
[NASA-CASE-NPO-14022-1] c32 N78-31321

Cam-operated pitch-change apparatus
[NASA-CASE-LEW-13050-1] c07 N79-14095

Digital numerically controlled oscillator
[NASA-CASE-MSC-16747-1] c33 N81-17349

High stability buffered phase comparator
[NASA-CASE-GSC-12645-1] c33 N81-31482

FREQUENCY CONVERTERS

Frequency to analog converters with unipolar field effect transistor for determining potential charge by pulse duration of input signal
[NASA-CASE-XNP-07040] c08 N71-12500

Describing static inverter with single or multiple phase output
[NASA-CASE-XMF-00663] c08 N71-18752

Voltage controlled, variable frequency relaxation oscillator with MOSFET variable current feed
[NASA-CASE-GSC-10022-1] c10 N71-25882

Development of family of frequency to amplitude converters for frequency analysis of complex input signal waveforms
[NASA-CASE-MSC-12395] c09 N72-25257

Variable frequency inverter for ac induction motors with torque, speed and braking control
[NASA-CASE-MFS-22088-1] c33 N75-15874

FREQUENCY DISCRIMINATORS

FM lock indicator for dithered FM code tracking loop
[NASA-CASE-NPO-14435-1] c33 N81-33405

FREQUENCY DISTRIBUTION

Monopole antenna system for maximum omnidirectional efficiency for use on satellites
[NASA-CASE-XLA-00414] c07 N70-38200

Variable frequency subcarrier oscillator with temperature compensation
[NASA-CASE-XNP-03916] c09 N71-28810

Ultra stable frequency distribution system
[NASA-CASE-NPO-13836-1] c32 N78-15323

FREQUENCY DIVIDERS

Low phase noise frequency divider for use with deep space network communication system
[NASA-CASE-NPO-11569] c10 N73-26229

Technique for extending the frequency range of digital dividers
[NASA-CASE-LAR-10730-1] c33 N74-10223

Symmetrical odd-modulus frequency divider
[NASA-CASE-NPO-13426-1] c33 N75-31330

Electronic analog divider
[NASA-CASE-LEW-11881-1] c33 N77-17354

Unequal split microwave power divider
[NASA-CASE-LAR-12889-1] c33 N81-31483

FREQUENCY DIVISION MULTIPLEXING

Earth satellite relay station for frequency multiplexed voice transmission
[NASA-CASE-GSC-10118-1] c07 N71-24621

System for monitoring condition responsive devices by using frequency division multiplex technique
[NASA-CASE-KSC-10521] c07 N73-20176

FREQUENCY MEASUREMENT

Measurement system for physical quantity represented by or converted to variable frequency signal
[NASA-CASE-MFS-20658-1] c14 N73-30386

Frequency measurement by coincidence detection with standard frequency
[NASA-CASE-MSC-14649-1] c33 N76-16331

Time domain phase measuring apparatus
[NASA-CASE-GSC-12228-1] c33 N79-10338

FREQUENCY MODULATION

Accelerometer with FM output signals indicative of mechanical strain on it
[NASA-CASE-XLA-00492] c14 N70-34799

Circuitry for generating sync signals in FM communication systems including video information
[NASA-CASE-XNP-10830] c07 N71-11281

Demodulator for simultaneous demodulation of two modulating ac signal carriers close in frequency
[NASA-CASE-XNP-01160] c07 N71-11298

Optical tracker with pair of FM reticles having patterns 90 deg out of phase
[NASA-CASE-XGS-05715] c23 N71-16100

Atomic hydrogen maser with bulb temperature control by output frequency difference signal for wall shift elimination
[NASA-CASE-HQN-10654-1] c16 N73-13489

Device for locating electrically nonlinear objects and determining distance to object by FM signal transmission
[NASA-CASE-KSC-10108] c14 N73-25461

Automatic frequency control for FM transmitter
[NASA-CASE-MFS-21540-1] c32 N74-19790

- Symmetrical odd-modulus frequency divider
[NASA-CASE-NPO-13426-1] c33 N75-31330
- Frequency modulated oscillator
[NASA-CASE-MFS-23181-1] c33 N77-17351
- FM/CW radar system
[NASA-CASE-MFS-22234-1] c32 N79-10264
- Thickness measurement system
[NASA-CASE-MFS-23721-1] c31 N79-28370
- Method and apparatus for Doppler frequency modulation of radiation
[NASA-CASE-NPO-14524-1] c32 N80-24510
- Adaptive control system for line-commutated inverters
[NASA-CASE-MFS-25209-1] c33 N81-31480
- FREQUENCY MULTIPLIERS**
Multiple varactor for generating high frequencies with high power and high conversion efficiency
[NASA-CASE-XMP-04958-1] c10 N71-26414
- Open loop digital frequency multiplier
[NASA-CASE-MSC-12709-1] c33 N77-24375
- FREQUENCY RANGES**
Variable time constant, wide frequency range smoothing network for noise removal from pulse chains
[NASA-CASE-XGS-01983] c10 N70-41964
- Variable frequency nuclear magnetic resonance spectrometer providing drive signals over wide frequency range and minimizing noise effects
[NASA-CASE-XNP-09830] c14 N71-26266
- Technique for extending the frequency range of digital dividers
[NASA-CASE-LAR-10730-1] c33 N74-10223
- Multichannel logarithmic RF level detector
[NASA-CASE-LAR-11021-1] c32 N76-14321
- Multiple rate digital command detection system with range clean-up capability
[NASA-CASE-NPO-13753-1] c32 N77-20289
- Multibeam single frequency synthetic aperture radar processor for imaging separate range swaths
[NASA-CASE-NPO-14525-1] c32 N79-19195
- FREQUENCY SCANNING**
Automatic communication signal monitoring system
[NASA-CASE-NPO-13941-1] c32 N79-10262
- Discriminator aided phase lock acquisition for suppressed carrier signals
[NASA-CASE-NPO-14311-1] c32 N79-14276
- Frequency-scanning particle size spectrometer
[NASA-CASE-NPO-13606-2] c35 N80-18364
- Apparatus and method for determining the position of a radiant energy source
[NASA-CASE-GSC-12147-1] c32 N81-27341
- FREQUENCY SHIFT**
Doppler frequency shift correction device for multiplex communication with Applications Technology Satellites
[NASA-CASE-XGS-02749] c07 N69-39978
- Serrodyne traveling wave tube reentrant amplifier for synchronous communication satellites operating at microwave frequencies
[NASA-CASE-IGS-01022] c07 N71-16088
- Multiplexed communication system design including automatic correction of transmission errors introduced by frequency spectrum shifts
[NASA-CASE-XNP-01306] c07 N71-20814
- Doppler shifted laser beam as fluid velocity sensor
[NASA-CASE-XAC-10770-1] c16 N71-24828
- Laser Doppler velocity simulator --- to induce frequency shift
[NASA-CASE-LAR-12176-1] c36 N80-16321
- FREQUENCY SHIFT KEYING**
Frequency shift keyed demodulator - circuit diagrams
[NASA-CASE-XGS-02889] c07 N71-11282
- Frequency shift keying apparatus for use with pulse code modulation data transmission system
[NASA-CASE-XGS-01537] c07 N71-23405
- FREQUENCY STABILITY**
Gas laser frequency stabilized by position of mirrors in resonant cavity
[NASA-CASE-XGS-03644] c16 N71-18614
- Solid state broadband stable power amplifier
[NASA-CASE-XNP-10854] c10 N71-26331
- FREQUENCY STANDARDS**
Development of method for synchronizing clocks at several ground stations based on signals received from spacecraft or satellites
[NASA-CASE-XNP-08875] c10 N71-23099
- Atomic standard with variable storage volume
[NASA-CASE-GSC-11895-1] c35 N76-15436
- Ultra stable frequency distribution system
[NASA-CASE-NFO-13836-1] c32 N78-15323
- External bulb variable volume maser
[NASA-CASE-GSC-12334-1] c36 N79-14362
- Precise RF timing signal distribution to remote stations --- fiber optics
[NASA-CASE-NPO-14749-1] c32 N81-14186
- FREQUENCY SYNCHRONIZATION**
Synchronized digital communication system
[NASA-CASE-XNP-03623] c09 N73-28084
- Ultra stable frequency distribution system
[NASA-CASE-NFO-13836-1] c32 N78-15323
- System for synchronizing synthesizers of communication systems
[NASA-CASE-GSC-12148-1] c32 N79-20296
- FREQUENCY SYNTHESIZERS**
Digitally controlled frequency synthesizer for pulse frequency modulation telemetry systems
[NASA-CASE-XGS-02317] c09 N71-23525
- System for synchronizing synthesizers of communication systems
[NASA-CASE-GSC-12148-1] c32 N79-20296
- Method for shaping and aiming narrow beams --- using a linear frequency chirp for sonar reception
[NASA-CASE-NFO-14632-1] c32 N80-12256
- FRICTION FACTOR**
Self lubricating gears and other mechanical parts having surface adapted to frictional contact
[NASA-CASE-MFS-14971] c15 N71-24984
- FRICTION MEASUREMENT**
Kinetic and static friction force measurement between magnetic tape and magnetic head surfaces
[NASA-CASE-XNP-08680] c14 N71-22995
- Static coefficient test method and apparatus
[NASA-CASE-GSC-11893-1] c35 N76-31489
- FRICTION REDUCTION**
Development of low friction magnetic recording tape
[NASA-CASE-IGS-00373] c23 N71-15978
- Hollow high strength rolling elements for antifriction bearings fabricated from preformed components
[NASA-CASE-LEW-11026-1] c15 N73-33383
- FRICTIONLESS ENVIRONMENTS**
Air bearings for near frictionless transfer of loads from one body to another
[NASA-CASE-XNP-01887] c15 N71-10617
- Platform with several ground effect pads and plenum chambers
[NASA-CASE-MFS-14685] c31 N71-15689
- Development of apparatus for simulating zero gravity conditions
[NASA-CASE-MFS-12750] c27 N71-16223
- FROST**
Insulating system for receptacles of liquefied gases using wire cloth for forming frost layer
[NASA-CASE-XNP-00341] c15 N70-33323
- FUEL CELLS**
Inorganic ion exchange membrane electrolytes for fuel cell use
[NASA-CASE-XNP-04264] c03 N69-21337
- Operation method for combined electrolysis device and fuel cell using molten salt to produce power by thermoelectric regeneration mechanism
[NASA-CASE-XLE-01645] c03 N71-20904
- Electrode sealing and insulation for fuel cells containing caustic liquid electrolytes using powdered plastic and metal
[NASA-CASE-XMS-01625] c15 N71-23022
- Development and characteristics of ion-exchange membrane and electrode assembly for fuel cells or electrolysis cells
[NASA-CASE-XMS-02063] c03 N71-29044
- Reconstituted asbestos matrix --- for use in fuel or electrolysis cells
[NASA-CASE-MSC-12568-1] c24 N76-14204
- Dual membrane hollow fiber fuel cell and method of operating same
[NASA-CASE-NPO-13732-1] c44 N79-10513
- FUEL COMBUSTION**
Fuel combustor
[NASA-CASE-LEW-12137-1] c25 N78-10224

FUEL CONTROL

Attitude and propellant flow control system for liquid propellant rocket vehicles
[NASA-CASE-XNF-00185] c21 N70-34539

Flexible ring slosh damping baffle for spacecraft fuel tank
[NASA-CASE-LAR-10317-1] c32 N71-16103

Submerged fuel tank baffles to prevent sloshing in liquid propellant rocket flight
[NASA-CASE-XLA-04605] c32 N71-16106

Control valve and coaxial variable injector for controlling bipropellant mixture ratio and flow
[NASA-CASE-XNF-09702] c15 N71-17654

Force balanced throttle valve for fuel control in rocket engines
[NASA-CASE-NPO-10808] c15 N71-27432

Variable-orifice hydraulic mechanism for aircraft gas turbine engine fuel control
[NASA-CASE-LEW-11187-1] c28 N73-19793

Automotive gas turbine fuel control
[NASA-CASE-LEW-12785-1] c37 N78-24545

Electrical servo actuator bracket --- fuel control valves on jet engines
[NASA-CASE-FRC-11044-1] c37 N81-33483

FUEL FLOW
Development of system for preheating vaporized fuel for use with internal combustion engines
[NASA-CASE-NPO-12072] c28 N72-22772

FUEL FLOW REGULATORS
Solenoid two-step valve for bipropellant flow rate control to rocket engine
[NASA-CASE-XMS-04890-1] c15 N70-22192

Water electrolysis rocket engine with self-regulating stoichiometric fuel mixing regulator
[NASA-CASE-XGS-08729] c28 N71-14044

Oil cooling system for a gas turbine engine
[NASA-CASE-LEW-12830-1] c07 N77-23106

FUEL GAGES
Response analyzing apparatus for liquid vapor interface sensor of sloshing rocket propellant
[NASA-CASE-MFS-11204] c14 N71-29134

FUEL INJECTION
Apparatus for cooling and injecting hypergolic propellants into combustion chamber of small rocket engine
[NASA-CASE-XLE-00303] c15 N70-36535

Fuel injection system for maximum combustion efficiency of rocket engines
[NASA-CASE-XLE-00111] c28 N70-38199

Propellant injection assembly having individually removable and replaceable nozzles for liquid fueled rocket engines
[NASA-CASE-XNF-00968] c28 N71-15660

Fuel and oxidizer injection head for thrust chamber of reaction engine
[NASA-CASE-NPO-10046] c28 N72-17843

Improved injector with porous plug for bubbles of gas into feed lines of electrically conductive liquid
[NASA-CASE-NPO-11377] c15 N73-27406

Supercritical fuel injection system
[NASA-CASE-LEW-12990-1] c07 N81-29129

FUEL OILS
Oil cooling system for a gas turbine engine
[NASA-CASE-LEW-12830-1] c07 N77-23106

FUEL PUMPS
Variable displacement fuel pump for internal combustion engines
[NASA-CASE-MSC-12139-1] c28 N71-14058

FUEL SYSTEMS
Internal labyrinth and shield structure to improve electrical isolation of propellant feed source from ion thruster
[NASA-CASE-LEW-10210-1] c28 N71-26781

Development of system for preheating vaporized fuel for use with internal combustion engines
[NASA-CASE-NPO-12072] c28 N72-22772

Supersonic-combustion rocket
[NASA-CASE-LEW-11058-1] c20 N74-13502

Fuel combustor
[NASA-CASE-LEW-12137-1] c25 N78-10224

Fuel delivery system including heat exchanger means
[NASA-CASE-LEW-12793-1] c37 N79-11403

A system for concurrently delivering a stream of powdered fuel and a stream of powdered oxidizer to a combustion chamber for a reaction motor
[NASA-CASE-MFS-23904-1] c20 N79-13077

Supercritical fuel injection system
[NASA-CASE-LEW-12990-1] c07 N81-29129

FUEL TANK PRESSURIZATION
Fuel tank pressure-relief device for venting cryogenic liquid vapors through tubes with porous plug
[NASA-CASE-XLE-00288] c15 N70-34247

Automatically reciprocating, high pressure pump for use in spacecraft cryogenic propellants
[NASA-CASE-XNF-04731] c15 N71-24042

Method and apparatus for pressurizing propellant tanks used in propulsion motor feed system
[NASA-CASE-XNF-00650] c27 N71-28929

FUEL TANKS
Reduced gravity liquid configuration simulator to study propellant behavior in rocket fuel tanks
[NASA-CASE-XLE-02624] c12 N69-39988

Flexible ring slosh damping baffle for spacecraft fuel tank
[NASA-CASE-LAR-10317-1] c32 N71-16103

Submerged fuel tank baffles to prevent sloshing in liquid propellant rocket flight
[NASA-CASE-XLA-04605] c32 N71-16106

Pressure sensor network for measuring liquid dynamic response in flight including fuel tank acceleration, liquid slosh amplitude, and fuel depth monitoring
[NASA-CASE-XLA-05541] c12 N71-26387

Electrical failure detector in solid rocket propellant motor insulation against thermal degradation by fuel grain
[NASA-CASE-XNF-03968] c14 N71-27186

FUEL VALVES
Apparatus for cooling and injecting hypergolic propellants into combustion chamber of small rocket engine
[NASA-CASE-XLE-00303] c15 N70-36535

Semitoroidal diaphragm cavitating flow control valve
[NASA-CASE-XNF-09704] c12 N71-18615

Filler valve design for supplying liquid propellants at high pressure to space vehicles
[NASA-CASE-XNF-01747] c15 N71-23024

Combination automatic-starting electrical plasma torch and gas shutoff valve --- for satellite attitude control
[NASA-CASE-XLE-10717] c37 N75-29426

FUELS
Atomic hydrogen storage method and apparatus
[NASA-CASE-LEW-12081-3] c28 N81-14103

FUNCTION GENERATORS
Mechanical function generators with potentiometer as sensing element
[NASA-CASE-XAC-00001] c15 N71-28952

Digital quasi-exponential function generator
[NASA-CASE-NPO-11130] c08 N72-20176

Service life of electromechanical device for generating sine/cosine functions
[NASA-CASE-LAR-10503-1] c09 N72-21248

Function generators for producing complex vibration mode patterns used to identify vibration mode data
[NASA-CASE-LAR-10310-1] c10 N73-20253

Integrated circuit tangent function generator
[NASA-CASE-MSC-13907-1] c10 N73-26230

FURLABLE ANTENNAS
Development and characteristics of extensible dipole antenna using deformable tubular metallic strip element
[NASA-CASE-HQN-00937] c07 N71-28979

Furlable antenna for spacecraft
[NASA-CASE-NPO-11361] c07 N72-32169

Furlable antenna --- antenna design
[NASA-CASE-NFO-13553-1] c33 N76-32457

FURNACES
High speed infrared furnace
[NASA-CASE-XLE-10466] c17 N69-25147

Development of black-body source calibration furnace
[NASA-CASE-XLE-01399] c33 N71-15625

Induction heating of metallurgical specimens to high temperatures in coil furnace
[NASA-CASE-XLE-04026] c14 N71-23267

Electric furnace for vacuum and zero gravity melting of high melting point materials during earth orbit
[NASA-CASE-MFS-20710] c11 N72-23215

High temperature strain gage calibration fixture
[NASA-CASE-LAR-11500-1] c35 N76-24523

Apparatus and method for heating a material in a transparent ampoule --- crystal growth
[NASA-CASE-MPS-25436-1] c76 N81-30012

FUSELAGES

Fuselage structure using advanced technology metal matrix fiber reinforced composites
[NASA-CASE-LAR-11688-1] c05 N78-18045

FUSION (WELDING)

Silver chloride use in technique for fusion bonding of graphite to silver, glass, ceramics, and certain other metals
[NASA-CASE-XGS-00963] c15 N69-39735

Process for fiberizing ceramic materials with high fusion temperatures and tensile strength
[NASA-CASE-XNP-00597] c18 N71-23088

Induction heating gun
[NASA-CASE-LAR-12540-1] c37 N80-11468

One step dual purpose joining technique
[NASA-CASE-LAR-12595-1] c37 N80-11469

FUSION WELDING

Fabricating solar cells with dielectric layers to improve glass fusion
[NASA-CASE-XGS-04531] c03 N69-24267

Control of fusion welding through use of thermocouple wire
[NASA-CASE-MPS-06074] c15 N71-20393

Electrical resistance butt welder for welding fine gauge tungsten/rhenium thermocouple wire
[NASA-CASE-LAR-10103-1] c15 N73-14468

Diffusion welding in air --- solid state welding of butt joint by fusion welding, surface cleaning, and heating
[NASA-CASE-LEW-11387-1] c37 N74-18128

G

GADOLINIUM

Doping silicon material with gadolinium to increase radiation resistance of solar cells
[NASA-CASE-XLE-02792] c26 N71-10607

Gadolinium or samarium doped-silicon semiconductor material with resistance to radiation damage for use in solar cells
[NASA-CASE-XLE-10715] c26 N71-23292

GALLIUM

Device for measuring two orthogonal components of force with gallium flotation of measuring target for use in vacuum environments
[NASA-CASE-XAC-04885] c14 N71-23790

GALLIUM ARSENIDES

Describing method for vapor deposition of gallium arsenide films to manganese substrates to provide semiconductor devices with low resistance substrates
[NASA-CASE-XNP-01328] c26 N71-18064

Gallium arsenide solar cell preparation by surface deposition of cuprous iodide on thin n-type polycrystalline layers and heating in iodine vapor
[NASA-CASE-XNP-01960] c09 N71-23027

Water content in vapor deposition atmosphere for forming n-type and p-type junctions of zinc doped gallium arsenide
[NASA-CASE-XNP-01961] c26 N71-29156

Vapor phase growth of groups 3-5 compounds by hydrogen chloride transport of the elements
[NASA-CASE-LAR-11144-1] c25 N75-26043

Vapor deposition apparatus --- semiconductors and gallium arsenides
[NASA-CASE-HQN-10462] c25 N75-29192

GALVANIC SKIN RESPONSE

Adhesive spray process for attaching biomedical skin electrodes
[NASA-CASE-XPR-07658-1] c05 N71-26293

GAMMA RAY SPECTROMETERS

Low intensity X-ray and gamma-ray imaging spectrometer
[NASA-CASE-GSC-12587-1] c35 N80-29635

GAMMA RAYS

Design of gamma ray spectrometer for measurement of intense radiation using Compton scattering effect
[NASA-CASE-MPS-21441-1] c14 N73-30392

Low intensity X-ray and gamma-ray imaging device --- fiber optics
[NASA-CASE-GSC-12263-1] c74 N79-20857

GANTRY CRANES

Design and characteristics of mechanically extended and telescoping boom on crane assembly
[NASA-CASE-NPO-11118] c03 N72-25021

GAPS

Electromagnetic transducer recording head having a laminated core section and tapered gap
[NASA-CASE-NPO-10711-1] c35 N77-21392

High voltage V-groove solar cell
[NASA-CASE-LEW-13401-1] c44 N81-16529

GARMENTS

Electromedical garment, applying vectorcardiologic type electrodes to human torsos for data recording during physical activity
[NASA-CASE-XPR-10856] c05 N71-11189

Flexible joint for pressurizable garment
[NASA-CASE-MSC-11072] c54 N74-32546

Spacesuit torso closure
[NASA-CASE-ABC-11100-1] c54 N78-31736

Urine collection apparatus --- feminine hygiene
[NASA-CASE-MSC-18381-1] c52 N81-28740

GAS ANALYSIS

Gas analyzer for bi-gaseous mixtures suitable for use in test facilities
[NASA-CASE-XLA-01131] c14 N71-10774

Describing crystal oscillator instrument for detecting condensable gas contaminants in vacuum apparatus
[NASA-CASE-NPO-10144] c14 N71-17701

Design and characteristics of time of flight mass spectrometer to measure or analyze gases at low pressures and time of flight of single gas molecule
[NASA-CASE-XNP-01056] c14 N71-23041

Microwave double resonance spectroscopy absorption cell for gas analysis
[NASA-CASE-LAR-10305] c14 N71-26137

Ion microprobe mass spectrometer with cooled electrode target for analyzing traces of fluids
[NASA-CASE-ERC-10014] c14 N71-28863

Nondispersive gas analysis using radiation detection for quantitative analysis
[NASA-CASE-ABC-10308-1] c06 N72-31141

Apparatus for analyzing gas samples in containers including vacuum chamber, mass spectrometer, and gas chromatography
[NASA-CASE-GSC-10903-1] c14 N73-12444

Coaxial anode wire for gas radiation counters
[NASA-CASE-GSC-11492-1] c35 N74-26949

Fast scan control for deflection type mass spectrometers
[NASA-CASE-LAR-11428-1] c35 N74-34857

NDIR gas analyzer based on absorption modulation ratios for known and unknown samples
[NASA-CASE-ABC-10802-1] c35 N75-30502

Stack plume visualization system
[NASA-CASE-LAR-11675-1] c45 N76-17656

Nulling device for detection of trace gases by NDIR absorption
[NASA-CASE-ABC-10760-1] c25 N76-22323

Analysis of volatile organic compounds --- trace amounts of organic volatiles in gas samples
[NASA-CASE-MSC-14428-1] c23 N77-17161

Fluid sampling device
[NASA-CASE-GSC-12143-1] c35 N77-32456

Stark cell optoacoustic detection of constituent gases in sample
[NASA-CASE-NPO-14143-1] c25 N81-14015

Stark effect spectrophone for continuous absorption spectra monitoring --- a technique for gas analysis
[NASA-CASE-NPO-15102-1] c25 N81-25159

GAS BAGS

Payload soft landing system using storable gas bag
[NASA-CASE-XLA-09881] c31 N71-16085

GAS BEARINGS

Externally pressurized air bearing for gyros operating in high temperature, low gravity environments
[NASA-CASE-XMF-00515] c15 N70-34664

Slit regulated gas journal bearing
[NASA-CASE-XNP-00476] c15 N70-38620

Air bearings for spacecraft gyros
[NASA-CASE-XMF-00339] c15 N70-39896

Air bearings for near frictionless transfer of loads from one body to another
[NASA-CASE-XMF-01887] c15 N71-10617

- Fluid power transmission and gas bearing system
[NASA-CASE-XMS-01445] c12 N71-16031
- Bismuth and lead surface coatings for gas bearings in aerospace engineering
[NASA-CASE-XGS-02011] c15 N71-20739
- Swivel support for gas bearing for position adjustment between ball and supporting cup
[NASA-CASE-XMF-07808] c15 N71-23812
- Low friction gas bearing system for fluid power transmission to bearing-supported payload
[NASA-CASE-ERC-10097] c15 N71-28465
- Gas bearing for model support with capacity for measuring angular displacement of model in bearing
[NASA-CASE-XLA-09346] c15 N71-28740
- Journal air bearing with cylindrical cup designed to ride on shaft
[NASA-CASE-MPS-20423] c15 N72-11388
- Air bearing for use in exterior environment for moving heavy loads
[NASA-CASE-WLP-10002] c15 N72-17451
- Axially and radially controllable magnetic bearing
[NASA-CASE-GSC-11551-1] c37 N76-18459
- Thrust bearing
[NASA-CASE-LEW-11949-1] c37 N76-29588
- Cantilever mounted resilient pad gas bearing
[NASA-CASE-LEW-12569-1] c37 N79-10418
- GAS CHROMATOGRAPHY**
- Micropacked column for rapid chromatographic analysis using low gas flow rates
[NASA-CASE-XNP-04816] c06 N69-39936
- Automatic baseline stabilization for ionization detector used in gas chromatograph
[NASA-CASE-XNP-03128] c10 N70-41991
- Gas chromatographic method for determining water in nitrogen tetroxide rocket propellant
[NASA-CASE-NPO-10234] c06 N72-17094
- Gas chromatographic method for analyzing hydrogen deuterium mixtures
[NASA-CASE-NPO-11322] c06 N72-25146
- Ultraviolet chromatographic detector for quantitative and qualitative analysis of compounds
[NASA-CASE-BQN-10756-1] c14 N72-25428
- Apparatus for analyzing gas samples in containers including vacuum chamber, mass spectrometer, and gas chromatography
[NASA-CASE-GSC-10903-1] c14 N73-12444
- Gas chromatograph injection system
[NASA-CASE-ARC-10344-2] c35 N75-26334
- Chelate-modified polymers for atmospheric gas chromatography
[NASA-CASE-ARC-11154-1] c25 N80-23383
- GAS COMPOSITION**
- Method and means for helium/hydrogen ratio measurement by alpha scattering
[NASA-CASE-NPO-14079-1] c25 N80-20334
- Mobile sampler for use in acquiring samples of terrestrial atmospheric gasses
[NASA-CASE-NPO-15220-1] c35 N81-24414
- GAS COOLED REACTORS**
- Gaseous core diffusion nuclear reactor for thermal energy generation
[NASA-CASE-LEW-10250-1] c22 N71-28759
- GAS COOLING**
- Gas balancing, cryogenic refrigeration apparatus with Joule-Thomson valve assembly
[NASA-CASE-NPO-10309] c15 N69-23190
- Gas cooled high temperature thermocouple
[NASA-CASE-XLE-09475-1] c33 N71-15568
- Containerless melting and rapid solidification apparatus and method
[NASA-CASE-MFS-25305-1] c35 N81-16427
- Apparatus and method for heating a material in a transparent ampoule --- crystal growth
[NASA-CASE-MFS-25436-1] c76 N81-30012
- GAS DENSITY**
- Dynamic sensor for gas pressure or density measurement
[NASA-CASE-XAC-02877] c14 N70-41681
- Device for simultaneously determining density, velocity, and temperature of streaming gas
[NASA-CASE-XLA-03375] c16 N71-24074
- Coherent light beam device and method for measuring gas density in vacuum chambers
[NASA-CASE-XER-11203] c14 N71-28994
- Absorbing gas reactivity control system for minimizing power distribution and perturbation in nuclear reactors
[NASA-CASE-XLE-04599] c22 N72-20597
- Electrodeposition method for producing crystalline material from dense gaseous medium
[NASA-CASE-NPO-10440] c15 N72-21466
- Wide range dynamic pressure sensor with vibrating diaphragm for measuring density and pressure of gaseous environment
[NASA-CASE-ARC-10263-1] c14 N72-22438
- Absolute pressure measuring device for measuring gas density level in high vacuum range
[NASA-CASE-LAR-10000] c14 N73-30394
- Method and apparatus for compensating reflection losses in a path length modulated absorption-absorption trace gas detector --- for determining density of gas
[NASA-CASE-ARC-10631-1] c74 N76-20958
- GAS DETECTORS**
- Method and transducer device for detecting presence of hydrogen gas
[NASA-CASE-XMF-03873] c06 N69-39733
- Development of device for detecting hydrogen in ambient environments
[NASA-CASE-MFS-11537] c14 N71-20442
- Gas leak detection in evacuated systems using ultraviolet radiation probe
[NASA-CASE-ERC-10034] c15 N71-24896
- Fast response miniature carbon dioxide detector with no moving parts for measuring concentration in any atmosphere
[NASA-CASE-MSC-13332-1] c14 N72-21408
- Fluorescence detector for monitoring atmospheric pollutants
[NASA-CASE-NPO-13231-1] c45 N75-27585
- Carbon monoxide monitor --- using real time operation
[NASA-CASE-MFS-22060-1] c35 N75-29380
- Method and apparatus for compensating reflection losses in a path length modulated absorption-absorption trace gas detector --- for determining density of gas
[NASA-CASE-ARC-10631-1] c74 N76-20958
- Indicator providing continuous indication of the presence of a specific pollutant in air
[NASA-CASE-NPO-13474-1] c45 N76-21742
- Particulate and aerosol detector
[NASA-CASE-LAR-11434-1] c35 N76-22509
- Cryogenic liquid sensor
[NASA-CASE-NPO-10619-1] c35 N77-21393
- Optically selective, acoustically resonant gas detecting transducer
[NASA-CASE-ARC-10639-1] c35 N78-13400
- Stark cell optoacoustic detection of constituent gases in sample
[NASA-CASE-NPO-14143-1] c25 N81-14015
- Stark effect spectrophone for continuous absorption spectra monitoring --- a technique for gas analysis
[NASA-CASE-NPO-15102-1] c25 N81-25159
- GAS DISCHARGE TUBES**
- Direct current powered self repeating plasma accelerator with interconnected annular and linear discharge channels
[NASA-CASE-XLA-03103] c25 N71-21693
- GAS DISCHARGES**
- Radio frequency noise generator having microwave slow-wave structure in gas discharge plasma
[NASA-CASE-XER-11019] c09 N71-23598
- GAS EVOLUTION**
- Development of filter system for control of outgas contamination in vacuum conditions using absorbent beds of molecular sieve zeolite, silica gel, and charcoal
[NASA-CASE-MFS-14711] c15 N71-26185
- GAS EXPANSION**
- Sealed electric storage battery with gas manifold interconnecting each cell
[NASA-CASE-XNP-03378] c03 N71-11051
- Method and apparatus for producing very low temperature refrigeration based on gas pressure balance
[NASA-CASE-XNP-08877] c15 N71-23025
- Gas-operated actuator with cyclic motion of expansion chamber
[NASA-CASE-NPO-11340] c15 N72-33477
- GAS FLOW**
- Tubular flow restrictor for gas-flow control in pipeline
[NASA-CASE-NPO-10117] c15 N71-15608

- Developing high pressure gas purification and filtration system for use in test operations of space vehicles
[NASA-CASE-MFS-12806] c14 N71-17588
- Burst diaphragm flow initiator for installation in short duration wind tunnels
[NASA-CASE-MFS-12915] c11 N71-17600
- Color photointerpretation of interference colors reflected from thin film oil-coated components in moving gases for gas flow visualization
[NASA-CASE-XMF-01779] c12 N71-20815
- Transducer for monitoring oxygen flow in respirator
[NASA-CASE-FRC-10012] c14 N72-17329
- Design, development, and operation of shock tube with bypass piston tunnel
[NASA-CASE-NPO-12109] c11 N72-22245
- Continuous gas flow control by fluidic proportional thruster system
[NASA-CASE-ABC-10106-1] c28 N72-22769
- Development of filter apparatus for gas separation and characteristics of filter cell support frame for improved operation
[NASA-CASE-MSC-12297] c14 N72-23457
- Pressurized inert gas feed for lighting system
[NASA-CASE-KSC-10644] c09 N72-27227
- Development of method for controlling vapor content of gas
[NASA-CASE-NPO-10633] c03 N72-28025
- Gas flow control device, including housing and input port
[NASA-CASE-NPO-11479] c15 N73-13462
- Compact hydrogenator
[NASA-CASE-NPO-11682-1] c35 N74-15127
- Apparatus for establishing flow of a fluid mass having a known velocity
[NASA-CASE-MFS-21424-1] c34 N74-27730
- Condensate removal device for heat exchanger
[NASA-CASE-MSC-14143-1] c77 N75-20139
- Flow measuring apparatus
[NASA-CASE-LEW-12078-1] c35 N75-30503
- Gas compression apparatus
[NASA-CASE-MSC-14757-1] c35 N78-10428
- Variable cycle gas turbine engines
[NASA-CASE-LEW-12916-1] c37 N78-17384
- GAS GENERATORS**
- Chlorine generator for purifying water in life support systems of manned spacecraft
[NASA-CASE-XLA-08913] c14 N71-28933
- Gas operated quick disconnect coupling for umbilical connectors
[NASA-CASE-NPO-11202] c15 N72-25450
- Actuator operated by electrolytic drive gas generator and evacuator
[NASA-CASE-NPO-11369] c15 N73-13467
- Development and operating principles of gas generator for deploying recovery parachutes from space capsules during atmospheric entry
[NASA-CASE-LAB-10549-1] c31 N73-13898
- Hydrogen rich gas generator
[NASA-CASE-NPO-13342-1] c37 N76-16446
- Hydrogen-rich gas generator
[NASA-CASE-NPO-13464-1] c44 N76-18642
- Hydrogen rich gas generator
[NASA-CASE-NPO-13342-2] c44 N76-29700
- Hydrogen rich gas generator
[NASA-CASE-NPO-13464-2] c44 N76-29704
- Hydrogen-rich gas generator
[NASA-CASE-NPO-13560-1] c44 N77-10636
- A gas-to-hydraulic power converter
[NASA-CASE-MSC-18794-1] c37 N81-24445
- GAS GUNS**
- Electric arc device for minimizing electrode ablation and heating gases to supersonic or hypersonic wind tunnel temperatures
[NASA-CASE-XAC-00319] c25 N70-41628
- GAS HEATING**
- Bi-metallic fluid displacement apparatus --- for stirring and heating stored gases and liquids
[NASA-CASE-ABC-10441-1] c35 N74-15126
- GAS INJECTION**
- Pressurized gas injection for burning rate control of solid propellants
[NASA-CASE-XLE-03494] c27 N71-21819
- Compact hydrogenator
[NASA-CASE-NPO-11682-1] c35 N74-15127
- Gas chromatograph injection system
[NASA-CASE-ABC-10344-2] c35 N75-26334
- In-situ laser retorting of oil shale
[NASA-CASE-LEW-12217-1] c43 N78-14452
- Gas turbine engine with recirculating bleed
[NASA-CASE-LEW-12452-1] c07 N78-25089
- Ozonation of cooling tower waters
[NASA-CASE-NPO-14340-1] c45 N80-14579
- Containerless melting and rapid solidification apparatus and method
[NASA-CASE-MFS-25305-1] c35 N81-16427
- GAS IONIZATION**
- Electrostatic modulator for communicating through plasma sheath formed around spacecraft during reentry
[NASA-CASE-XLA-01400] c07 N70-41331
- Multichannel photoionization chamber for measuring absorption, photoionization yield, and coefficients of gases
[NASA-CASE-ERC-10044-1] c14 N71-27090
- Modulated hydrogen ion flame detector
[NASA-CASE-ABC-10322-1] c35 N76-18403
- Gas ion laser construction for electrically isolating the pressure gauge thereof
[NASA-CASE-MFS-22597] c36 N78-17366
- Charge transfer reaction laser with preionization means
[NASA-CASE-NPO-13945-1] c36 N78-27402
- Hydrogen hollow cathode ion source
[NASA-CASE-LEW-12940-1] c72 N80-33186
- GAS LASERS**
- Gas laser frequency stabilized by position of mirrors in resonant cavity
[NASA-CASE-XGS-03644] c16 N71-18614
- Inert gas metallic vapor laser
[NASA-CASE-NPO-13449-1] c36 N75-32441
- Diffused waveguiding capillary tube with distributed feedback for a gas laser
[NASA-CASE-NPO-13544-1] c36 N76-18428
- Gas ion laser construction for electrically isolating the pressure gauge thereof
[NASA-CASE-MFS-22597] c36 N78-17366
- Charge transfer reaction laser with preionization means
[NASA-CASE-NPO-13945-1] c36 N78-27402
- GAS LUBRICANTS**
- High temperature gas lubricant consisting of two fluoro-bromo-methanes
[NASA-CASE-XLE-00353] c18 N70-39897
- Thrust bearing
[NASA-CASE-LEW-11949-1] c37 N76-29588
- Cantilever mounted resilient pad gas bearing
[NASA-CASE-LEW-12569-1] c37 N79-10418
- GAS MASERS**
- Solid state chemical source for ammonia beam masers
[NASA-CASE-XGS-01504] c16 N70-41578
- Atomic hydrogen maser with bulb temperature control by output frequency difference signal for wall shift elimination
[NASA-CASE-HQN-10654-1] c16 N73-13489
- Method of producing a storage bulb for an atomic hydrogen maser
[NASA-CASE-NPO-13050-1] c36 N75-15029
- Atomic standard with variable storage volume
[NASA-CASE-GSC-11895-1] c35 N76-15436
- GAS MIXTURES**
- Gas analyzer for bi-gaseous mixtures suitable for use in test facilities
[NASA-CASE-XLA-01131] c14 N71-10774
- Equipment for measuring partial water vapor pressure in gas tank
[NASA-CASE-XMS-01618] c14 N71-20741
- Separation cell with permeable membranes for fluid mixture component separation
[NASA-CASE-XMS-02952] c18 N71-20742
- Gas chromatographic method for analyzing hydrogen deuterium mixtures
[NASA-CASE-NPO-11322] c06 N72-25146
- Hydrogen rich gas generator
[NASA-CASE-NPO-13342-2] c44 N76-29700
- Hydrogen-rich gas generator
[NASA-CASE-NPO-13560-1] c44 N77-10636
- Chemical vapor deposition reactor --- providing uniform film thickness
[NASA-CASE-NPO-13650-1] c25 N79-28253
- GAS PIPES**
- Tubular flow restrictor for gas flow control in pipeline
[NASA-CASE-NPO-10117] c15 N71-15608

GAS PRESSURE

Expulsion and measuring device for determining quantity of liquid in tank under conditions of weightlessness
[NASA-CASE-XMS-01546] c14 N70-40233

Dynamic sensor for gas pressure or density measurement
[NASA-CASE-XAC-02877] c14 N70-41681

Wide range dynamic pressure sensor with vibrating diaphragm for measuring density and pressure of gaseous environment
[NASA-CASE-ARC-10263-1] c14 N72-22438

Measurement of gas production of microorganisms --- using pressure sensors
[NASA-CASE-LAR-11326-1] c35 N75-33368

Depressurization of arc lamps
[NASA-CASE-NPO-10790-1] c33 N77-21316

Pressure limiting propellant actuating system
[NASA-CASE-MSC-18179-1] c20 N80-18097

GAS STREAMS

Device for simultaneously determining density, velocity, and temperature of streaming gas
[NASA-CASE-XLA-03375] c16 N71-24074

Stagnation pressure probe --- for measuring pressure of supersonic gas streams
[NASA-CASE-LAR-11139-1] c35 N74-32878

Variable mixer propulsion cycle
[NASA-CASE-LEW-12917-1] c07 N78-18067

Simultaneous treatment of SO₂ containing stack gases and waste water
[NASA-CASE-MSC-16258-1] c45 N79-12584

GAS TEMPERATURE

Device for simultaneously determining density, velocity, and temperature of streaming gas
[NASA-CASE-XLA-03375] c16 N71-24074

GAS TRANSPORT

Purging means and method for Xenon arc lamps
[NASA-CASE-NPO-11978] c31 N78-17238

GAS TUBES

Toggle mechanism for pinching metal tubes
[NASA-CASE-GSC-12274-1] c37 N79-28550

GAS TURBINE ENGINES

Variable-orifice hydraulic mechanism for aircraft gas turbine engine fuel control
[NASA-CASE-LEW-11187-1] c28 N73-19793

Swirl can, full-annulus combustion chambers for high performance gas turbine engines
[NASA-CASE-LEW-11326-1] c23 N73-30665

Controlled separation combustor --- airflow distribution in gas turbine engines
[NASA-CASE-LEW-11593-1] c20 N76-14190

Fused silicide coatings containing discrete particles for protecting niobium alloys --- used in space shuttle thermal protection systems and turbine engine components
[NASA-CASE-LEW-11179-1] c27 N76-16229

Dual output variable pitch turbofan actuation system
[NASA-CASE-LEW-12419-1] c07 N77-14025

Oil cooling system for a gas turbine engine
[NASA-CASE-LEW-12830-1] c07 N77-23106

Blade retainer assembly
[NASA-CASE-LEW-12608-1] c07 N77-27116

Nickel base alloy --- for gas turbine engine stator vanes
[NASA-CASE-LEW-12270-1] c26 N77-32280

Bearing seat usable in a gas turbine engine
[NASA-CASE-LEW-12477-1] c37 N77-32501

Oil cooling system for a gas turbine engine
[NASA-CASE-LEW-12321-1] c37 N78-10467

Variable cycle gas turbine engines
[NASA-CASE-LEW-12916-1] c37 N78-17384

Integrated gas turbine engine-nacelle
[NASA-CASE-LEW-12389-2] c07 N78-18066

Variable mixer propulsion cycle
[NASA-CASE-LEW-12917-1] c07 N78-18067

Automotive gas turbine fuel control
[NASA-CASE-LEW-12785-1] c37 N78-24545

Gas turbine engine with recirculating bleed
[NASA-CASE-LEW-12452-1] c07 N78-25089

Independent power generator
[NASA-CASE-LAR-11208-1] c44 N78-32539

Redundant disc
[NASA-CASE-LEW-12496-1] c07 N78-33101

Integrated gas turbine engine-nacelle
[NASA-CASE-LEW-12389-3] c07 N79-14096

Variable area exhaust nozzle
[NASA-CASE-LEW-12378-1] c07 N79-14097

A silicon-slurry/aluminide coating --- protects aircraft and land-based gas turbine engines
[NASA-CASE-LEW-13343-1] c24 N80-26389

Power control for hot gas engines
[NASA-CASE-NPO-14220-1] c37 N81-14318

Curved centerline air intake for a gas turbine engine
[NASA-CASE-LEW-13201-1] c07 N81-14999

Apparatus for sensor failure detection and correction in a gas turbine engine control system
[NASA-CASE-LEW-12907-2] c07 N81-19115

GAS TURBINES

Method for maintaining good performance in gas turbine during air flow distortion
[NASA-CASE-LEW-10286-1] c28 N71-28915

Gas turbine exhaust nozzle --- for noise reduction
[NASA-CASE-LEW-11569-1] c07 N74-15453

Gas turbine engine with convertible accessories
[NASA-CASE-LEW-12390-1] c07 N78-17056

Counter pumping debris excluder and separator --- gas turbine shaft seals
[NASA-CASE-LEW-11855-1] c07 N78-25090

Direct heating surface combustor
[NASA-CASE-LEW-11877-1] c34 N78-27357

Apparatus and method for reducing thermal stress in a turbine rotor
[NASA-CASE-LEW-12232-1] c07 N79-10057

Method and turbine for extracting kinetic energy from a stream of two-phase fluid
[NASA-CASE-NPO-14130-1] c34 N79-20335

Corrosion resistant thermal barrier coating --- protecting gas turbines and other engine parts
[NASA-CASE-LEW-13088-1] c26 N81-25188

GAS VALVES

High-temperature, high-pressure spherical segment valve
[NASA-CASE-XAC-00074] c15 N70-34817

Shrink-fit vacuum system gas valve
[NASA-CASE-XGS-00587] c15 N70-35087

Gas valve operated by thermally expanding and contracting device
[NASA-CASE-XLE-00815] c15 N70-35407

Three-port transfer valve with one port open continuously suitable for manned space flight
[NASA-CASE-XAC-01158] c15 N71-23051

GAS WELDING

Emission spectroscopy method for contamination monitoring of inert gas metal arc welding
[NASA-CASE-XMP-02039] c15 N71-15871

Grain refinement control in TIG arc welding
[NASA-CASE-MSC-19095-1] c37 N75-19683

GAS-LIQUID INTERACTIONS

Fluid control apparatus and method
[NASA-CASE-LAR-11110-1] c34 N75-26282

GAS-METAL INTERACTIONS

Improved refractory coatings --- sputtered coatings on substrates that form stable nitrides
[NASA-CASE-LEW-23169-2] c26 N81-16209

GASDYNAMIC LASERS

Diatom infrared gasdynamic laser --- for producing different wavelengths
[NASA-CASE-ARC-10370-1] c36 N75-31426

GASEOUS DIFFUSION

Gas purged dry box glove reducing permeation of air or moisture into dry box or isolator by diffusion through glove
[NASA-CASE-XLE-02531] c05 N71-23080

Gaseous core diffusion nuclear reactor for thermal energy generation
[NASA-CASE-LEW-10250-1] c22 N71-28759

Gas diffusion liquid storage bag and method of use for storing blood
[NASA-CASE-NPO-13930-1] c52 N79-14749

GASEOUS FISSION REACTORS

Gaseous core diffusion nuclear reactor for thermal energy generation
[NASA-CASE-LEW-10250-1] c22 N71-28759

GASEOUS ROCKET PROPELLANTS

Electrostatic ion engines using high velocity electrons to ionize propellant
[NASA-CASE-XLE-00376] c28 N70-37245

Detonation reaction engine comprising outer housing enclosing pair of inner walls for continuous flow
[NASA-CASE-XMP-06926] c28 N71-22983

CASES

Apparatus and process for volumetrically dispensing reagent quantities of volatile

- chemicals for small batch reactions
[NASA-CASE-NPO-10070] c15 N71-27372
- Observation window for internal gas confining chamber
[NASA-CASE-NPO-10890] c11 N73-12265
- Device for detection of combustion light preceding gaseous explosions
[NASA-CASE-LAR-10739-1] c14 N73-16484
- Low gravity phase separator
[NASA-CASE-MSC-14773-1] c35 N78-12390
- Water separator
[NASA-CASE-XMS-01295-1] c37 N79-21345
- GASKETS**
- Leakproof soft metal seal for use in very high vacuum systems operating at cryogenic temperatures
[NASA-CASE-XGS-02441] c15 N70-41629
- Reinforced polyquinoxaline gasket and method of preparing the same --- resistant to ionizing radiation and liquid hydrogen temperatures
[NASA-CASE-MFS-21364-1] c37 N74-18126
- GATES (CIRCUITS)**
- Flux gate magnetometer with toroidal gating coil and solenoidal output coil for signal modulation or amplification
[NASA-CASE-XGS-01881] c09 N70-40123
- Silicon controlled rectifier pulse gate amplifier for blocking false gating caused by negative transient voltages
[NASA-CASE-XLA-07497] c09 N71-12514
- Logic AND gate for fluid circuits
[NASA-CASE-XLA-07391] c12 N71-17579
- Synchronous counter design incorporating cascaded binary stages driven by previous stages and inputs through NAND gates
[NASA-CASE-XGS-02440] c08 N71-19432
- Switching series regulator with gating control network
[NASA-CASE-XMS-09352] c09 N71-23316
- Memory device for two-dimensional radiant energy array computers
[NASA-CASE-GSC-11839-2] c60 N78-10709
- Transformer regulated self-stabilizing chopper
[NASA-CASE-XGS-09186] c33 N78-17295
- Pulsed phase locked loop strain monitor
[NASA-CASE-LAR-12772-1] c33 N81-15195
- Controller for computer control of brushless dc motors --- automobile engines
[NASA-CASE-NPO-13970-1] c33 N81-20352
- Combinational logic for generating gate drive signals for phase control rectifiers
[NASA-CASE-MFS-25208-1] c33 N81-27402
- GATES (OPENINGS)**
- Longitudinal film gate and lock mechanism for securing film in motion picture cameras under vibration and high acceleration loads
[NASA-CASE-LAR-10686] c14 N71-28935
- GAW-1 AIRFOIL**
- Airfoil shape for flight at subsonic speeds --- design analysis and aerodynamic characteristics of the GAW-1 airfoil
[NASA-CASE-LAR-10585-1] c02 N76-22154
- GEAR TEETH**
- Wobble gear drive mechanism --- for aerospace environments
[NASA-CASE-WOO-00625] c37 N78-17385
- Belt for transmitting power from a cogged driving member to a cogged driven member
[NASA-CASE-GSC-12289-1] c37 N80-32717
- GEARS**
- Precision stepping drive device using cam disk
[NASA-CASE-MFS-14772] c15 N71-17692
- Gearing system for eliminating backlash and filtering input torque fluctuations from high inertia load
[NASA-CASE-XGS-04227] c15 N71-21744
- Self lubricating gears and other mechanical parts having surface adapted to frictional contact
[NASA-CASE-MFS-14971] c15 N71-24984
- Concentric differential gearing arrangement
[NASA-CASE-ARC-10462-1] c37 N74-27901
- Sequencing device utilizing planetary gear set
[NASA-CASE-MSC-19514-1] c37 N79-20377
- Power control for hot gas engines
[NASA-CASE-NPO-14220-1] c37 N81-14318
- GELLED ROCKET PROPELLANTS**
- Method and apparatus for producing fine particles in cryogenic liquid bath for gelled rocket propellants
[NASA-CASE-NPO-10250] c23 N71-16212
- GELS**
- Intermittent type silica gel adsorption refrigerator for providing temperature control for spacecraft components
[NASA-CASE-XNP-00920] c15 N71-15906
- GENERAL AVIATION AIRCRAFT**
- Explosively activated egress area
[NASA-CASE-LAR-12624-1] c03 N81-29107
- GENERATORS**
- Apparatus for establishing flow of a fluid mass having a known velocity
[NASA-CASE-MFS-21424-1] c34 N74-27730
- GEODESY**
- Navigation system and method
[NASA-CASE-GSC-12508-1] c04 N81-26085
- GEODETTIC SURVEYS**
- Geodetic distance measuring apparatus
[NASA-CASE-GSC-12609-1] c36 N81-22344
- GEODIMETERS**
- Geodetic distance measuring apparatus
[NASA-CASE-GSC-12609-1] c36 N81-22344
- GEOLOGICAL SURVEYS**
- Borehole geological assessment
[NASA-CASE-NPO-14231-1] c46 N80-10709
- Geological assessment probe
[NASA-CASE-NPO-14558-1] c46 N80-24906
- GEOMETRY**
- Rhomboid prism pair for rotating the plane of parallel light beams --- laser velocimeters
[NASA-CASE-ARC-11311-1] c74 N81-16882
- GERMANIUM**
- Germanium coated microbridge and method
[NASA-CASE-MFS-23274-1] c33 N78-13320
- GIMBALS**
- Gimballed partially submerged nozzle for solid propellant rocket engines for providing directional control
[NASA-CASE-XNF-01544] c28 N70-34162
- Inertial gimbal alignment system for spacecraft guidance
[NASA-CASE-XNF-01669] c21 N71-23289
- Three stage motion restraining mechanism for restraining and damping three dimensional vibrational movement of gimballed package during launch of spacecraft
[NASA-CASE-GSC-10306-1] c15 N71-24694
- Hermetically sealed vibration damper design for use in gimbal assembly of spacecraft inertial guidance system
[NASA-CASE-MSC-10959] c15 N71-26243
- Low friction bearing and lock mechanism for two-axis gimbal carrying satellite payload
[NASA-CASE-GSC-10556-1] c31 N71-26537
- Failure detection and control means for improved drift performance of a gimballed platform system
[NASA-CASE-MFS-23551-1] c04 N76-26175
- Autonomous navigation system --- gyroscopic pendulum for air navigation
[NASA-CASE-ARC-11257-1] c04 N81-21047
- Aircraft body-axis rotation measurement system
[NASA-CASE-FRC-11043-1] c06 N81-22048
- GIRDERS**
- Beam connector apparatus and assembly
[NASA-CASE-MFS-25134-1] c31 N81-12283
- GLANDS (SEALS)**
- Development of mating flat surfaces to inhibit leakage of fluid around shafts
[NASA-CASE-XLE-10326-2] c15 N72-29488
- Circumferential shaft seal
[NASA-CASE-LEW-12119-2] c37 N81-26447
- GLASS**
- Fabricating solar cells with dielectric layers to improve glass fusion
[NASA-CASE-IGS-04531] c03 N69-24267
- Reduced gravity liquid configuration simulator to study propellant behavior in rocket fuel tanks
[NASA-CASE-XLE-02624] c12 N69-39988
- Metal pattern bonding technique for cover glass attachment to silicon solar cells for space applications
[NASA-CASE-XLE-08569] c03 N71-23449
- Apparatus for applying thin glass slides to solar cells
[NASA-CASE-NPO-10575] c03 N72-25019
- Glass-to-metal seals comprising relatively high expansion metals

- [NASA-CASE-LEW-10698-1] c37 N74-21063
Covered silicon solar cells and method of manufacture --- with polymeric films
[NASA-CASE-LEW-11065-2] c44 N76-14600
Window defect planar mapping technique
[NASA-CASE-MSC-19442-1] c74 N77-10899
Method of forming shrink-fit compression seal
[NASA-CASE-LAR-11563-1] c37 N77-23482
Reaction cured glass and glass coatings
[NASA-CASE-ARC-11051-1] c27 N78-32260
Inorganic spark chamber frame and method of making the same
[NASA-CASE-GSC-12354-1] c35 N80-20565
Method for milling and drilling glass
[NASA-CASE-GSC-12636-1] c37 N80-29705
Method of forming frozen spheres in a force-free drop tower --- microballoons for inertial confinement fusion
[NASA-CASE-NPO-14845-1] c31 N81-16328
- GLASS COATINGS**
Method of attaching cover glass to silicon solar cell without using adhesive
[NASA-CASE-XLE-08569-2] c03 N71-24681
Helium outgassing process for fused glass coating on ion accelerator grid
[NASA-CASE-LEW-10278-1] c15 N71-28582
Development of process for constructing protective covers for solar cells
[NASA-CASE-GSC-11514-1] c03 N72-24037
Transmitting and reflecting diffuser --- using ultraviolet grade fused silica coatings
[NASA-CASE-LAR-10385-3] c74 N78-15879
- GLASS ELECTRODES**
Liquid junction for glass electrode or pH meters
[NASA-CASE-NPO-10682] c15 N70-34699
Apparatus and method of inserting a microelectrode in body tissue or the like using vibration means
[NASA-CASE-NPO-13910-1] c52 N79-27636
- GLASS FIBER REINFORCED PLASTICS**
Low density bismaleimide-carbon microballoon composites
[NASA-CASE-ARC-11040-1] c24 N79-16915
Method of manufacture of bonded fiber flywheel --- fiberglass-epoxy
[NASA-CASE-MPS-23674-1] c24 N81-29163
- GLASS FIBERS**
Nonmagnetic hermetically sealed battery case made of epoxy resin and woven glass tape for use with electrochemical cells in spacecraft
[NASA-CASE-XGS-00886] c03 N71-11053
Lathe tool and holder combination for machining resin impregnated fiberglass cloth laminates
[NASA-CASE-XLA-10470] c15 N72-21489
Development and characteristics of polyimide impregnated laminates with fiberglass cloth backing for application as printed circuit boards
[NASA-CASE-MPS-20408] c18 N73-12604
Method of repairing discontinuity in fiberglass structures
[NASA-CASE-LAR-10416-1] c24 N74-30001
Fiber modified polyurethane foam for ballistic protection
[NASA-CASE-ARC-10714-1] c27 N76-15310
Vacuum pressure molding technique
[NASA-CASE-LAR-10073-1] c37 N76-24575
Fiberglass/epoxy composite automotive door structure including a glass-reinforced intrusion strip
[NASA-CASE-NPO-15057-1] c24 N81-19230
- GLAUCOMA**
Intra-ocular pressure normalization technique and equipment
[NASA-CASE-LEW-12955-1] c52 N80-14684
- GLIDE PATHS**
Integrated lift/drag controller for aircraft
[NASA-CASE-ARC-10456-1] c05 N75-12930
- GLOBES**
Orbital and entry tracking accessory for globes --- to provide range requirements for reentry vehicles to any landing site
[NASA-CASE-LAR-10626-1] c19 N74-21015
- GLOVES**
Gas purged dry box glove reducing permeation of air or moisture into dry box or isolator by diffusion through glove
[NASA-CASE-XLE-02531] c05 N71-23080
- Restraining mechanism
[NASA-CASE-MSC-13054] c54 N78-17677
- GLOW DISCHARGES**
Deposition of alloy films --- on irregularly shaped metal object
[NASA-CASE-LEW-11262-1] c27 N74-13270
Boron trifluoride coatings for thermoplastic materials and method of applying same in glow discharge
[NASA-CASE-ARC-11057-1] c27 N78-31233
Electric discharge for treatment of trace contaminants
[NASA-CASE-ARC-10975-1] c33 N79-15245
Use of glow discharge in fluidized beds
[NASA-CASE-ARC-11245-1] c33 N80-11326
- GLUCOSE**
Use of enzyme hexokinase and glucose to reduce inherent light levels of ATP in luciferase compositions
[NASA-CASE-XGS-05533] c04 N69-27487
- GOLD COATINGS**
Lithium drifted silicon radiation detector with gold rectifying contacts
[NASA-CASE-XLE-10529] c14 N69-23191
- GONDOLAS**
System for controlling torque buildup in suspension of gondola connected to balloon by parachute shroud lines
[NASA-CASE-GSC-11077-1] c02 N73-13008
- GRANULAR MATERIALS**
Development of device for separating, collecting, and viewing soil particles
[NASA-CASE-XNP-09770] c15 N71-20440
- GRAPHITE**
Silver chloride use in technique for fusion bonding of graphite to silver, glass, ceramics, and certain other metals
[NASA-CASE-XGS-00963] c15 N69-39735
Method of preparing graphite reinforced aluminum composite
[NASA-CASE-MPS-21077-1] c24 N75-28135
Method of adhering bone to a rigid substrate using a graphite fiber reinforced bone cement
[NASA-CASE-NPO-13764-1] c27 N78-17215
Atomic hydrogen storage method and apparatus
[NASA-CASE-LEW-12081-3] c28 N81-14103
Ion sputter textured graphite --- applications to electron tube devices
[NASA-CASE-LEW-12919-1] c24 N81-27198
- GRAPHITE-EPOXY COMPOSITE MATERIALS**
Partial interlaminar separation system for composites
[NASA-CASE-LAR-12065-1] c24 N81-14000
- GRATINGS (SPECTRA)**
Concave grating spectrometer for use in near and vacuum ultraviolet regions
[NASA-CASE-XGS-01036] c14 N70-40003
Diffractoid grating configuration for X-ray and ultraviolet focusing
[NASA-CASE-GSC-12357-1] c74 N80-21140
- GRAVIMETERS**
Device for determining acceleration of gravity by interferometric measurement of travel of falling body
[NASA-CASE-XMP-05844] c14 N71-17587
- GRAVITATION**
Design of precision vertical alignment system using laser with gravitationally sensitive cavity
[NASA-CASE-ARC-10444-1] c16 N73-33397
Anti-gravity device
[NASA-CASE-MPS-22758-1] c70 N75-26789
- GRAVITATIONAL CONSTANT**
Gravity device for accurate and rapid indication of relative gravity conditions aboard accelerating carrier
[NASA-CASE-XMP-00424] c11 N70-38196
- GRAVITATIONAL EFFECTS**
Gravity environment simulation by locomotion and restraint aid for studying manual operation performance of astronauts at zero gravity
[NASA-CASE-ARC-10153] c05 N71-28619
Rotary plant growth accelerating apparatus --- weightlessness
[NASA-CASE-ARC-10722-1] c51 N75-25503
- GRAVITATIONAL FIELDS**
Difference indicating circuit used in conjunction with device measuring gravitational fields

- [NASA-CASE-IXP-08274] c10 N71-13537
Process for preparation of large-particle-size monodisperse latexes
[NASA-CASE-MPS-25000-1] c25 N81-19242
- GRAVITY GRADIENT SATELLITES**
Stabilization system for gravity-oriented satellites using single damper rod
[NASA-CASE-IAC-01591] c31 N71-17729
Method of stationkeeping for lenticular gravity gradient satellites
[NASA-CASE-XLA-03132] c31 N71-22969
- GRAVITY GRADIOMETERS**
Gravity device for accurate and rapid indication of relative gravity conditions aboard accelerating carrier
[NASA-CASE-IXP-00424] c11 N70-38196
Gravity gradient attitude control system with gravity gradiometer and reaction wheels for artificial satellite attitude control
[NASA-CASE-GSC-10555-1] c21 N71-27324
- GRAZING INCIDENCE**
Diffractoid grating configuration for X-ray and ultraviolet focusing
[NASA-CASE-GSC-12357-1] c74 N80-21140
- GRIDS**
Method of making dished ion thruster grids
[NASA-CASE-LEW-11694-1] c20 N75-18310
Apparatus for forming dished ion thruster grids
[NASA-CASE-LEW-11694-2] c37 N76-14461
Method of constructing dished ion thruster grids to provide hole array spacing compensation
[NASA-CASE-LEW-11876-1] c20 N76-21276
Solar cell grid patterns
[NASA-CASE-NPO-13087-2] c44 N76-31666
- GRINDING (MATERIAL REMOVAL)**
Laser device for removing material from rotating object for dynamic balancing
[NASA-CASE-MPS-11279] c16 N71-20400
Grinding mixtures of powdered metals and inert fillers for conversion to halide
[NASA-CASE-LEW-10450-1] c15 N72-25448
Method of forming a sharp edge on an optical device
[NASA-CASE-GSC-12348-1] c74 N80-24149
- GRINDING MACHINES**
Grinding arrangement for ball nose milling cutters
[NASA-CASE-LAR-10450-1] c37 N74-27905
- GROOVES**
Nonreusable energy absorbing device comprising ring member with plurality of recesses, cutting members, and guide member mounted in each recess
[NASA-CASE-IXP-10040] c15 N71-22677
Spiral groove seal --- for hydraulic rotating shaft
[NASA-CASE-LEW-10326-3] c37 N74-10474
Spiral groove seal --- for rotating shaft
[NASA-CASE-XLE-10326-4] c37 N74-15125
- GROUND EFFECT MACHINES**
Hovering type flying vehicle design and principle mechanisms for manned or unmanned use
[NASA-CASE-MSC-12111-1] c02 N71-11039
Platform with several ground effect pads and plenum chambers
[NASA-CASE-MPS-14685] c31 N71-15689
Open tube guideway for high speed air cushioned vehicles
[NASA-CASE-LAR-10256-1] c85 N74-34672
- GROUND HANDLING**
Supporting and protecting frame structure and plug for empty thrust chamber assembly, handling, and shipping
[NASA-CASE-IXP-00580] c11 N70-35383
- GROUND STATIONS**
Traffic control system for supersonic transports using synchronous satellite for data relay between vehicles and ground station
[NASA-CASE-GSC-10087-1] c02 N71-19287
Spacecraft transponder and ground station radar system for mapping planetary surfaces
[NASA-CASE-NPO-11001] c07 N72-21118
Ultra stable frequency distribution system
[NASA-CASE-NPO-13836-1] c32 N78-15323
- GROUND SUPPORT EQUIPMENT**
Equipment for testing of ground station ranging equipment and spacecraft transponders
[NASA-CASE-IXS-05454-1] c07 N71-12391
Controlled release device for use in launching rockets or missiles
- [NASA-CASE-IXS-03338] c15 N71-24043
Apparatus for measuring an aircraft's speed and height
[NASA-CASE-LAR-12275-1] c35 N79-18296
- GROUND-AIR-GROUND COMMUNICATIONS**
Fabry-Perot interferometer retrodirective reflector modulator for optical communication
[NASA-CASE-IGS-04480] c16 N69-27491
Closed loop radio communication ranging system to determine distance between moving airborne vehicle and fixed ground station
[NASA-CASE-IXP-01501] c21 N70-41930
Location identification system with ground based transmitter and aircraft borne receiver/decoder
[NASA-CASE-EBC-10324] c07 N72-25173
Satellite personal communications system
[NASA-CASE-NPO-14480-1] c32 N80-20448
- GROUT**
Antenna grout replacement system
[NASA-CASE-NPO-15205-1] c37 N81-19457
- GUARDS (SHIELDS)**
Safety shield for vacuum/pressure chamber viewing port
[NASA-CASE-GSC-12513-1] c31 N81-19343
- GUIDANCE (MOTION)**
Hovering type flying vehicle design and principle mechanisms for manned or unmanned use
[NASA-CASE-MSC-12111-1] c02 N71-11039
Development of adjustable attitude guide block for setting pins perpendicular to irregular convex work surface
[NASA-CASE-XLA-07911] c15 N71-15571
Longitudinal film gate and lock mechanism for securing film in motion picture cameras under vibration and high acceleration loads
[NASA-CASE-LAR-10686] c14 N71-28935
Combination guide and rotary bearing for freely moving shaft
[NASA-CASE-XLA-00013] c15 N71-29136
Guide member for stabilizing cable of open shaft elevator
[NASA-CASE-KSC-10513] c15 N72-25453
A system for providing an integrated display of instantaneous information relative to aircraft attitude, heading, altitude, and horizontal situation
[NASA-CASE-FRC-11005-1] c06 N79-24988
- GUIDANCE SENSORS**
Light sensitive digital aspect sensor for attitude control of earth satellites or space probes
[NASA-CASE-IGS-00359] c14 N70-34158
Guidance analyzer having suspended spacecraft simulating sphere for astronavigation
[NASA-CASE-IXP-09572] c14 N71-15621
Optical gauging system for monitoring machine tool alignment
[NASA-CASE-IAC-09489-1] c15 N71-26673
Development of light sensing system for controlled orientation of object relative to sun or other light source
[NASA-CASE-NPO-11311] c14 N72-25414
Sun direction detection system
[NASA-CASE-NPO-13722-1] c74 N77-22951
Terminal guidance sensor system
[NASA-CASE-NPO-14521-1] c54 N79-20746
Improved Sun-sensing guidance system for high-altitude aircraft
[NASA-CASE-FRC-11052-1] c04 N80-20249
Aircraft body-axis rotation measurement system
[NASA-CASE-FRC-11043-1] c06 N81-22048
Focal plane array optical proximity sensor
[NASA-CASE-NPO-15155-1] c74 N81-22894
- GUN LAUNCHERS**
Self-obturator gas-operated launcher for launching projectiles in decontaminated medium
[NASA-CASE-NPO-11013] c11 N72-22247
- GUN PROPELLANTS**
Nitramine propellants --- gun propellant burning rate
[NASA-CASE-NPC-14103-1] c28 N78-31255
Hypervelocity gun --- using both electric and chemical energy for projectile propulsion
[NASA-CASE-XLE-03186-1] c09 N79-21084
- GUNN EFFECT**
Voltage tunable Gunn effect semiconductor for microwave generation
[NASA-CASE-XEE-07894] c09 N71-18721

Gunn effect microwave diodes with RF shielding
[NASA-CASE-ERC-10119] c26 N72-21701

Multiterminal Gunn-type semiconductor microwave generator for producing stable signals
[NASA-CASE-XER-07895] c26 N72-25679

Microwave generator using Gunn effect for magnetic tuning
[NASA-CASE-NPO-12106] c09 N73-15235

GUNS
Method of peening and portable peening gun
[NASA-CASE-MFS-23047-1] c37 N76-18454

GYRATORS
Design of gyrator circuit using operational amplifiers to replace ungrounded inductors
[NASA-CASE-XAC-10608-1] c09 N71-12517

Gyrator circuit using MOS field effect transistors
[NASA-CASE-MFS-21433] c09 N73-20232

Integrated P-channel MOS gyrator
[NASA-CASE-MFS-22343-1] c33 N74-34638

Integrable power gyrator --- with Z-matrix design using parallel transistors
[NASA-CASE-MFS-22342-1] c33 N75-30428

GYROSCOPES
Externally pressurized air bearing for gyros operating in high temperature, low gravity environments
[NASA-CASE-XMP-00515] c15 N70-34664

Air bearings for spacecraft gyros
[NASA-CASE-XMP-00339] c15 N70-39896

Development of spacecraft experiment pointing and attitude control system
[NASA-CASE-XLA-05464] c21 N71-14132

Temperature compensated digital inertial sensor --- circuit for maintaining inertial element of gyroscope or accelerometer at constant position
[NASA-CASE-NPO-13044-1] c35 N74-15094

All sky pointing attitude control system
[NASA-CASE-ARC-10716-1] c35 N77-20399

GYROSCOPIC PENDULUMS
Autonomous navigation system --- gyroscopic pendulum for air navigation
[NASA-CASE-ARC-11257-1] c04 N81-21047

GYROSTABILIZERS
Passive dual spin misalignment compensators --- gyro stabilized device
[NASA-CASE-GSC-11479-1] c35 N74-28097

Annular momentum control device used for stabilization of space vehicles and the like
[NASA-CASE-LAR-11051-1] c15 N76-14158

Aircraft body-axis rotation measurement system
[NASA-CASE-FRC-11043-1] c06 N81-22048

H

HAFNIUM
Thermal shock resistant hafnia ceramic materials
[NASA-CASE-LAR-10894-1] c18 N73-14584

HALIDES
Grinding mixtures of powdered metals and inert fillers for conversion to halide
[NASA-CASE-LRW-10450-1] c15 N72-25448

Zinc-halide battery with molten electrolyte
[NASA-CASE-NPO-11961-1] c44 N76-18643

HALL EFFECT
Current measurement by use of Hall effect generator
[NASA-CASE-XAC-01662] c14 N71-23037

Brushless dc tachometer design with Hall effect crystals and output voltage magnitude proportional to rotor speed
[NASA-CASE-MFS-20385] c09 N71-24904

Development of Hall effect transducer for converting mechanical shaft rotations into proportional electrical signals
[NASA-CASE-LAR-10620-1] c09 N72-25255

Speed control system for dc motor equipped with brushless Hall effect device
[NASA-CASE-MFS-20207-1] c09 N73-32107

Hall effect magnetometer
[NASA-CASE-LRW-11632-2] c35 N75-13213

Magnetic field control --- electromechanical torquing devices
[NASA-CASE-MFS-23828-1] c33 N80-17359

HALL GENERATORS
Current measurement by use of Hall effect generator
[NASA-CASE-XAC-01662] c14 N71-23037

HALOGENS
Modification of polyurethanes with alkyl halide resins, inorganic salts, and encapsulated volatile and reactive halogen for fuel fire control
[NASA-CASE-ARC-10098-1] c06 N71-24739

HAMMERS
Exponential horn, copper plate, magnetic hammer, and anvil in apparatus for making diamonds
[NASA-CASE-MFS-20698] c15 N72-20446

HAND (ANATOMY)
Mechanically operated hand which can depress trigger using touch control device
[NASA-CASE-MFS-20413] c15 N72-21463

Therapeutic hand exerciser
[NASA-CASE-LAR-11667-1] c52 N76-19785

Compact artificial hand
[NASA-CASE-NPO-13906-1] c54 N79-24652

HANDLING EQUIPMENT
Supporting and protecting frame structure and plug for empty thrust chamber assembly, handling, and shipping
[NASA-CASE-XMP-00580] c11 N70-35383

Handling tool for printed circuit cards
[NASA-CASE-MFS-20453] c15 N71-29133

HARDENING (MATERIALS)
Method of heat treating age-hardenable alloys
[NASA-CASE-XMP-01311] c26 N75-29236

HARMONIC GENERATORS
Wideband generator for producing sine wave quadrature and second harmonic of input signal
[NASA-CASE-NPO-11133] c10 N72-20223

HARNESSES
Helmet and torso tiedown mechanism for shortening pressure suits upon inflation
[NASA-CASE-XMS-00784] c05 N71-12335

One hand backpack harness
[NASA-CASE-LAR-10102-1] c05 N72-23085

Shoulder harness and lap belt restraint system
[NASA-CASE-ARC-10519-2] c05 N75-25915

HATCHES
Design and specifications of emergency escape system for spacecraft structures
[NASA-CASE-HSC-12086-1] c05 N71-12345

HEART FUNCTION
Development of instantaneous reading tachometer for measuring electrocardiogram signal rate
[NASA-CASE-MFS-20418] c14 N73-24473

Ultrasonic biomedical measuring and recording apparatus --- for recording motion of internal organs such as heart valves
[NASA-CASE-ARC-10597-1] c52 N74-20726

HEART RATE
Digital cardiometer incorporating circuit for measuring heartbeat rate of subject over predetermined portion of one minute also converting rate to beats per minute
[NASA-CASE-XMS-02399] c05 N71-22896

Development of instantaneous reading tachometer for measuring electrocardiogram signal rate
[NASA-CASE-MFS-20418] c14 N73-24473

Digital computing cardiometer
[NASA-CASE-MFS-20284-1] c52 N74-12778

Pulse transducer with artifact signal attenuator --- heart rate sensors
[NASA-CASE-FRC-11012-1] c52 N80-23969

HEAT
Thermionic converter for converting heat energy directly into electrical energy
[NASA-CASE-XLE-01903] c22 N71-23599

HEAT EXCHANGERS
Electrothermal rocket engine using resistance heated heat exchanger
[NASA-CASE-XLE-00267] c28 N70-33356

Space suit body heat exchanger design composed of thermal conductance yarn and liquid coolant loops
[NASA-CASE-XMS-09571] c05 N71-19439

Dual solid cryogens for spacecraft refrigeration insuring low temperature cooling for extended periods
[NASA-CASE-GSC-10188-1] c23 N71-24725

Shell-side liquid metal boiler employing tube and shell heat exchanger
[NASA-CASE-NPO-10831] c33 N72-20915

Heat exchanger and decontamination system for multistage refrigeration unit
[NASA-CASE-NPO-10634] c23 N72-25619

- Condensate removal device for heat exchanger
[NASA-CASE-MSC-14143-1] c77 N75-20139
- Heat exchanger system and method
[NASA-CASE-LAR-10799-2] c34 N76-17317
- Heat transfer device
[NASA-CASE-MFS-22938-1] c34 N76-18374
- Heat exchanger
[NASA-CASE-MFS-22991-1] c34 N77-10463
- Flat-plate heat pipe
[NASA-CASE-GSC-11998-1] c34 N77-32413
- Combuster --- low nitrogen oxide formation
[NASA-CASE-NPO-13958-1] c25 N79-11151
- Fuel delivery system including heat exchanger means
[NASA-CASE-LEW-12793-1] c37 N79-11403
- Heat exchanger --- rocket combustion chambers and cooling systems
[NASA-CASE-LEW-12252-1] c34 N79-13288
- Heat exchanger and method of making --- bonding rocket chambers with a porous metal matrix
[NASA-CASE-LEW-12441-1] c34 N79-13289
- Thermal energy transformer
[NASA-CASE-NPO-14058-1] c44 N79-18443
- Portable breathing system --- a breathing apparatus using a rebreathing system of heat exchangers for carbon dioxide removal
[NASA-CASE-MSC-16182-1] c54 N80-10799
- Potential heat exchange fluids for use in sulfuric acid vaporizers
[NASA-CASE-NPO-15015-1] c25 N80-23394
- Heat exchanger and method of making --- rocket lining
[NASA-CASE-LEW-12441-2] c34 N80-24573
- A cycling Joule Thomson refrigerator
[NASA-CASE-NPO-15251-1] c31 N81-19344
- Heat exchanger and method of making
[NASA-CASE-LEW-12441-3] c44 N81-24519
- HEAT FLUX**
- Heat flux sensor assembly with proviso for heat shield to reduce radiative transfer between sensor elements
[NASA-CASE-XMS-05909-1] c14 N69-27459
- Heat flux sensor adapted for mounting on aircraft or spacecraft to measure aerodynamic heat flux inflow to aircraft skin
[NASA-CASE-XPR-03802] c33 N71-23085
- Radial heat flux transformer for use in heating and cooling processes
[NASA-CASE-NPO-10828] c33 N72-17948
- HEAT MEASUREMENT**
- Electromagnetic energy detection by thermal sensor with vibrating electrode
[NASA-CASE-XAC-10768] c09 N71-18830
- Specific wavelength colorimeter --- for measuring given solute concentration in test sample
[NASA-CASE-MSC-14081-1] c35 N74-27860
- HEAT OF FORMATION**
- An improved synthesis of 2, 4, 8, 10-tetroxaspiro (5.5)undecane
[NASA-CASE-ARC-11243-1] c27 N79-30375
- Improved synthesis of polyformals
[NASA-CASE-ARC-11244-1] c27 N79-30376
- HEAT PIPES**
- Electric power system utilizing thermionic plasma diodes in parallel and heat pipes as cathodes
[NASA-CASE-XMP-05843] c03 N71-11055
- Microwave power receiving antenna solving heat dissipation problems by construction of elements as heat pipe devices
[NASA-CASE-MFS-20333] c09 N71-13486
- Double-wall isothermal cylinder containing heat transfer fluid thermal reservoir as spacecraft insulation cover
[NASA-CASE-MFS-20355] c33 N71-25353
- Structural heat pipe --- for spacecraft wall thermal insulation system
[NASA-CASE-GSC-11619-1] c34 N75-12222
- Method of forming a wick for a heat pipe
[NASA-CASE-NPO-13391-1] c34 N76-27515
- Production of I-123
[NASA-CASE-LEW-11390-3] c25 N76-29379
- Heat pipe with dual working fluids
[NASA-CASE-ARC-10198] c34 N78-17336
- Multi-chamber controllable heat pipe
[NASA-CASE-ARC-10199] c34 N78-17337
- Thermal control canister
[NASA-CASE-GSC-12253-1] c34 N79-31523
- Heat pipe honeycomb panel
[NASA-CASE-LAR-12637-1] c34 N81-12362
- Heat pipes to reduce engine exhaust emissions
[NASA-CASE-LEW-12590-1] c25 N81-19245
- Heat pipes containing alkali metal working fluid
[NASA-CASE-LEW-12253-1] c34 N81-22310
- Heat pipe cooled probe
[NASA-CASE-LAR-12588-1] c44 N81-24525
- HEAT PUMPS**
- Thermal pump-compressor for converting solar energy
[NASA-CASE-XLA-00377] c33 N71-17610
- Manually activated heat pump for mechanically converting human operator output into heat energy
[NASA-CASE-NPO-10677] c05 N72-11084
- Design and development of thermomechanical pump for transmitting warning fluid through fluid circuit to control temperature of spacecraft instrumentation
[NASA-CASE-NFO-11417] c15 N73-24513
- Magnetic heat pumping
[NASA-CASE-LEW-12508-1] c34 N78-17335
- Cooling system for high speed aircraft
[NASA-CASE-LAR-12406-1] c05 N81-26114
- HEAT RADIATORS**
- Capillary radiator for carrying heat transfer liquid in planetary spacecraft structures
[NASA-CASE-XLB-03307] c33 N71-14035
- Hydraulic actuator design for space deployment of heat radiators
[NASA-CASE-MSC-11817-1] c15 N71-26611
- Development of method and equipment for testing heat radiative properties of material under controlled environmental conditions
[NASA-CASE-MFS-20096] c14 N71-30026
- HEAT RESISTANT ALLOYS**
- Preparation of nickel alloys for jet turbine blades operating at high temperatures
[NASA-CASE-XLB-00151] c17 N70-33283
- Nickel alloy series for aerospace structures subjected to high temperatures
[NASA-CASE-XLB-00283] c17 N70-36616
- High temperature cobalt-base alloy resistant to corrosion by liquid metals and to sublimation in vacuum environment
[NASA-CASE-XLB-02991] c17 N71-16025
- Brazing alloy adapted for brazing corrosion resistant steel to refractory metals, also for brazing refractory metals to other refractory metals
[NASA-CASE-XNP-03063] c17 N71-23365
- Superalloys from prealloyed powders at high temperatures
[NASA-CASE-LEW-10805-1] c15 N73-13465
- Method of making pressure tight seal for super alloy
[NASA-CASE-LAR-10170-1] c37 N74-11301
- Method of forming articles of manufacture from superalloy powders
[NASA-CASE-LEW-10805-2] c37 N74-13179
- Refractory porcelain enamel passive control coating for high temperature alloys
[NASA-CASE-MFS-22324-1] c27 N75-27160
- Cermet composition and method of fabrication --- heat resistant alloys and powders
[NASA-CASE-NPO-13120-1] c27 N76-15311
- Metallic hot wire anemometer --- for high speed wind tunnel tests
[NASA-CASE-ARC-10911-1] c35 N77-20400
- Method of growing composites of the type exhibiting the Soret effect --- improved structure of eutectic alloy crystals
[NASA-CASE-MFS-22926-1] c24 N77-27187
- Directionally solidified eutectic gamma plus beta nickel-base superalloys
[NASA-CASE-LEW-12906-1] c26 N77-32279
- Nickel base alloy --- for gas turbine engine stator vanes
[NASA-CASE-LEW-12270-1] c26 N77-32280
- Directionally solidified eutectic gamma-gamma nickel-base superalloys
[NASA-CASE-LEW-12905-1] c26 N78-18183
- Heat pipes containing alkali metal working fluid
[NASA-CASE-LEW-12253-1] c34 N81-22310
- HEAT SHIELDING**
- Heat flux sensor assembly with proviso for heat shield to reduce radiative transfer between sensor elements

[NASA-CASE-XMS-05909-1] c14 N69-27459
 Oven for heat treating heat shields
 [NASA-CASE-XMS-04318] c15 N69-27871
 Compact heat shielding for interplanetary space vehicles
 [NASA-CASE-XMS-00486] c33 N70-33344
 Sandwich panel structure for removing heat from shield between hot and cold areas
 [NASA-CASE-XLA-00349] c33 N70-37979
 Aerodynamic configuration of reentry vehicle heat shield to provide longitudinal and directional stability at hypersonic velocities
 [NASA-CASE-XMS-04142] c31 N70-41631
 Transpirationally cooled heat ablation system for interplanetary spacecraft reentry shielding
 [NASA-CASE-XMS-02677] c31 N70-42075
 Synthesis of azine polymers for heat shields by azine-aromatic aldehyde reaction
 [NASA-CASE-XMF-08656] c06 N71-11242
 Synthesis of schiff bases for heat shields by acetal amine reactions
 [NASA-CASE-XMF-08652] c06 N71-11243
 Preparation and characteristics of lightweight refractory insulation
 [NASA-CASE-XMF-05279] c18 N71-16124
 Development and characteristics of thermal radiation shielding of refractory metal foil used for induction furnace
 [NASA-CASE-XLE-03432] c33 N71-24145
 Design and development of spacecraft with outer shell structure heat shielding and built-in, removable excursion module
 [NASA-CASE-MSC-13047-1] c31 N71-25434
 Structure of fabric layers for micrometeoroid protection garment with capability for eliminating heat shorts for use in manufacturing space suits
 [NASA-CASE-MSC-12109] c18 N71-26285
 Thermal insulation attaching means --- adhesive bonding of felt vibration insulators under ceramic tiles
 [NASA-CASE-MSC-12619-2] c27 N79-12221
 Thermal insulation protection means
 [NASA-CASE-MSC-12737-1] c24 N79-25142
 Installing fiber insulation
 [NASA-CASE-MSC-16973-1] c37 N81-14317
 Thermal barrier pressure seal --- shielding junctions between spacecraft control surfaces and structures
 [NASA-CASE-MSC-18134-1] c37 N81-15363

HEAT SINKS
 Thermal conductive, electrically insulated cleavable adhesive connection between electronic module and heat sink
 [NASA-CASE-XMS-02087] c09 N70-41717
 Development and characteristics of calorimeter with integral heat sink for maintenance of constant temperature
 [NASA-CASE-XMF-04208] c33 N71-29051
 Tubular sublimatory evaporator heat sink
 [NASA-CASE-ARC-10912-1] c34 N77-19353
 Compact pulsed laser having improved heat conductance
 [NASA-CASE-NPO-13147-1] c36 N77-25502
 Hypersonic airbreathing missile
 [NASA-CASE-LAR-12264-1] c15 N78-32168
 Electroexplosive device
 [NASA-CASE-NPO-13858-1] c28 N79-11231
 Thermal control canister
 [NASA-CASE-GSC-12253-1] c34 N79-31523

HEAT SOURCES
 Black body radiometer design with temperature sensing and cavity heat source cone winding
 [NASA-CASE-XNP-09701] c14 N71-26475
 Thermally cascaded thermoelectric generator with radioisotopic heat source
 [NASA-CASE-NPO-10753] c03 N72-26031
 Protected isotope heat source --- for atmospheric reentry protection and heat transmission to spacecraft
 [NASA-CASE-LEW-11227-1] c73 N75-30876
 Portable electrophoresis apparatus using minimum electrolyte
 [NASA-CASE-NPO-13274-1] c25 N79-10163

HEAT STORAGE
 Solar energy trap
 [NASA-CASE-NPS-22744-1] c44 N76-24696
 Thermal energy storage system --- operating on superheating of liquids

[NASA-CASE-NPS-23167-1] c44 N76-31667

HEAT TRANSFER
 Thermal switch for transferring excess heat from one region to another heat dissipating one
 [NASA-CASE-XNP-00463] c33 N70-36847
 Sandwich panel structure for removing heat from shield between hot and cold areas
 [NASA-CASE-XLA-00349] c33 N70-37979
 Apparatus for cryogenic liquid storage with heat transfer reduction and for liquid transfer at zero gravity conditions
 [NASA-CASE-XLE-00345] c15 N70-38020
 Method for improving heat transfer characteristics in nucleate boiling process
 [NASA-CASE-XMS-04268] c33 N71-16277
 Design and development of device for cooling inner conductor of coaxial cable
 [NASA-CASE-XNP-09775] c09 N71-20445
 Heat sensing instrument, using thermocouple junction connected under heavy conducting material
 [NASA-CASE-XLA-01551] c14 N71-22989
 Mixed liquid and vapor phase analyzer design with thermocouples for relative heat transfer measurement
 [NASA-CASE-NPO-10691] c14 N71-26199
 Development and characteristics of cooling system to maintain temperature of rack mounted electronic modules
 [NASA-CASE-MSC-12389] c33 N71-29052
 Development of method and equipment for testing heat radiative properties of material under controlled environmental conditions
 [NASA-CASE-NPS-20096] c14 N71-30026
 Manually activated heat pump for mechanically converting human operator output into heat energy
 [NASA-CASE-NPO-10677] c05 N72-11084
 High intensity radiant energy pulse source for calibrating heat transfer gages with thermoluminescent shutter activation
 [NASA-CASE-ARC-10178-1] c09 N72-17152
 Development of thermocouple instrument for measuring temperature of wall heated by flowing fluid without disturbing boundary layer
 [NASA-CASE-XLE-05230] c14 N72-27410
 Development and characteristics of thermal control system for maintaining constant temperature within spacecraft module with wide variations of component heat transfer
 [NASA-CASE-GSC-11018-1] c31 N73-30829
 Thermal flux transfer system for maintaining thrust chamber of operative reaction motor at given temperatures
 [NASA-CASE-NPO-12070-1] c28 N73-32606
 Electrostatically controlled heat transfer system for conducting thermal energy
 [NASA-CASE-NPO-11942-1] c33 N73-32818
 Heat transfer device
 [NASA-CASE-NPO-11120-1] c34 N74-18552
 Heat exchanger
 [NASA-CASE-NPS-22991-1] c34 N77-10463
 Heat pipe with dual working fluids
 [NASA-CASE-ARC-10198] c34 N78-17336
 Low cost cryostat
 [NASA-CASE-NPO-14513-1] c35 N81-14287
 Heat pipes containing alkali metal working fluid
 [NASA-CASE-LEW-12253-1] c34 N81-22310
 Heat exchanger and method of making
 [NASA-CASE-LEW-12441-3] c44 N81-24519
 A stable density-stratification solar pond
 [NASA-CASE-NFO-15419-1] c44 N81-27599

HEAT TRANSMISSION
 Heat flow calorimeter --- measures output of Ni-Cd batteries
 [NASA-CASE-GSC-11434-1] c34 N74-27859
 Protected isotope heat source --- for atmospheric reentry protection and heat transmission to spacecraft
 [NASA-CASE-LEW-11227-1] c73 N75-30876
 Heat transparent high intensity high efficiency solar cell
 [NASA-CASE-LEW-12892-1] c44 N81-27598

HEAT TREATMENT
 High speed infrared furnace
 [NASA-CASE-XLE-10466] c17 N69-25147
 Oven for heat treating heat shields
 [NASA-CASE-XMS-04318] c15 N69-27871

- Vacuum method for molding thermosetting compounds used as ablative materials
[NASA-CASE-XLA-01091] c15 N71-10672
- Production of refractory bodies with controlled porosity by pressing and heating mixtures of refractory and inert metal powders
[NASA-CASE-LEW-10393-1] c17 N71-15468
- White paint production by heating impure aluminum silicate clay having low solar absorptance
[NASA-CASE-XNP-02139] c18 N71-24184
- Method for diffusion welding dissimilar metals in vacuum chamber
[NASA-CASE-GSC-10303] c15 N72-22487
- Method of heat treating a formed powder product material
[NASA-CASE-LEW-10805-3] c26 N74-10521
- Diffusion welding --- heat treatment of nickel alloys following single step vacuum welding process
[NASA-CASE-LEW-11388-2] c37 N74-21055
- Heat sterilizable patient ventilator
[NASA-CASE-NPO-13313-1] c54 N75-27761
- Method of heat treating age-hardenable alloys
[NASA-CASE-XNP-01311] c26 N75-29236
- Method for detecting pollutants --- through chemical reactions and heat treatment
[NASA-CASE-LAR-11405-1] c45 N76-31714
- Method of producing complex aluminum alloy parts of high temper, and products thereof
[NASA-CASE-MSC-19693-1] c26 N78-24333
- Bakeable McLeod gauge
[NASA-CASE-XGS-01293-1] c35 N79-33450
- Precision heat forming of tetrafluoroethylene tubing
[NASA-CASE-MSC-18430-1] c31 N80-17292
- Heat treat fixture and method of heat treating
[NASA-CASE-LAR-11821-1] c26 N80-28492
- HEATERS**
Reliable electrical element heater using plural wire system and backup power sources
[NASA-CASE-MFS-21462-1] c33 N74-14935
- HEATING**
Development of system for preheating vaporized fuel for use with internal combustion engines
[NASA-CASE-NPO-12072] c28 N72-22772
- Diffusion welding in air --- solid state welding of butt joint by fusion welding, surface cleaning, and heating
[NASA-CASE-LEW-11387-1] c37 N74-18128
- Heating and cooling system --- for fatigue test specimens
[NASA-CASE-LAR-12393-1] c39 N80-25693
- An improved synthesis of 2,4,8,10-tetroxaspiro (5.5) undecane
[NASA-CASE-ARC-11243-2] c23 N80-31472
- HEATING EQUIPMENT**
Using heat control unit to preheat circulating fluid
[NASA-CASE-XMF-04237] c33 N71-16278
- Electric arc heater with supersonic nozzle and fixed arc length for use in high temperature wind tunnels
[NASA-CASE-IAC-01677] c09 N71-20E16
- Radial heat flux transformer for use in heating and cooling processes
[NASA-CASE-NPO-10828] c33 N72-17948
- Self-cycling fluid heater for heating continuous fluid stream to ultrahigh temperatures to facilitate chemical reactions
[NASA-CASE-MSC-15567-1] c33 N73-16518
- Portable heatable container
[NASA-CASE-NPO-14237-1] c44 N80-20808
- HELICAL ANTENNAS**
Weatherproof helix antenna
[NASA-CASE-IKS-08485] c07 N71-19493
- Collapsible high gain antenna which can be automatically expanded to operating state
[NASA-CASE-KSC-10392] c07 N73-26117
- HELICOPTER WAKES**
Variable geometry rotor system for direct control over wake vortex
[NASA-CASE-LAR-10557] c02 N72-11018
- HELICOPTERS**
Hingeless helicopter rotor with improved stability
[NASA-CASE-ARC-10807-1] c05 N77-17029
- Non-destructive method for applying and removing instrumentation on helicopter rotor blades
[NASA-CASE-LAR-11201-1] c35 N78-24515
- Constant lift rotor for a heavier than air craft
[NASA-CASE-ARC-11045-1] c05 N79-17847
- Helicopter rotor airfoil
[NASA-CASE-LAR-12396-1] c02 N79-24958
- HELIOSTATS**
Solar tracking system
[NASA-CASE-MFS-23999-1] c44 N81-24520
- HELIUM**
Helium refining by superfluidity
[NASA-CASE-XNP-00733] c06 N70-34946
- Apparatus and method capable of receiving large quantity of high pressure helium, removing impurities, and discharging at received pressure
[NASA-CASE-XMF-06888] c15 N71-24044
- Method and apparatus for generating coherent radiation in the ultra-violet region and above by use of distributed feedback
[NASA-CASE-NPO-13346-1] c36 N76-29575
- Cryostat system for temperatures on the order of 2 deg K or less
[NASA-CASE-NPO-13459-1] c31 N77-10229
- Thermal compensator for closed-cycle helium refrigerator --- assuring constant temperature for an infrared laser diode
[NASA-CASE-GSC-12168-1] c31 N79-17029
- HELIUM HYDROGEN ATMOSPHERES**
Method and means for helium/hydrogen ratio measurement by alpha scattering
[NASA-CASE-NPO-14079-1] c25 N80-20334
- HELIUM IONS**
Charge transfer reaction laser with preionization means
[NASA-CASE-NPO-13945-1] c36 N78-27402
- HELIUM-NEON LASERS**
Design and development of multichannel laser remote control system using modulated helium-neon laser as transmitter and light collector as receiving antenna
[NASA-CASE-LAR-10311-1] c16 N73-16536
- Laser measuring system for incremental assemblies --- measuring wire-wrapped frame assemblies in spark chambers
[NASA-CASE-GSC-12321-1] c36 N80-18380
- Direction sensitive laser velocimeter --- determining the direction of particles using a helium-neon laser
[NASA-CASE-LAR-12177-1] c36 N81-24422
- HELMETS**
Transparent polycarbonate resin, shell helmet and latch design for high altitude and space flight
[NASA-CASE-XMS-04935] c05 N71-11190
- Electrode attached to helmets for detecting low level signals from skin of living creatures
[NASA-CASE-ARC-10043-1] c05 N71-11193
- Venting device for pressurized space suit helmet to eliminate vomit expelled by crewmen
[NASA-CASE-XMS-09652-1] c05 N71-26333
- Helmet latching and attaching ring
[NASA-CASE-XMS-04670] c54 N78-17678
- Protective garment ventilation system
[NASA-CASE-XMS-04928] c54 N78-17679
- Helmet feedport
[NASA-CASE-XMS-09653] c54 N78-17680
- Emergency space-suit helmet
[NASA-CASE-MSC-10954-1] c54 N78-18761
- Helmet weight simulator
[NASA-CASE-LAR-12320-1] c54 N81-27806
- HEMISPHERICAL SHELLS**
Light baffle with oblate hemispheroid surface and shading flange
[NASA-CASE-NPO-10337] c14 N71-15604
- HERMETIC SEALS**
Piston in bore cutter for severing parachute control lines and sealing cable hole to prevent water leakage into load
[NASA-CASE-XMS-04072] c15 N70-42017
- Hermetically sealed explosive release mechanism for actuator device
[NASA-CASE-XGS-00824] c15 N71-16078
- Sealing apparatus for joining two pieces of frangible materials
[NASA-CASE-XLA-01494] c15 N71-24164
- Method for locating leaks in hermetically sealed containers
[NASA-CASE-BEC-10045] c15 N71-24910
- Hermetically sealed vibration damper design for use in global assembly of spacecraft inertial guidance system

[NASA-CASE-MSC-10959] c15 N71-26243
Method of forming ceramic to metal seals
impervious to gaseous and liquid mercury at
high temperature
[NASA-CASE-XNP-01263-2] c15 N71-26312
Pressure seals suitable for use in environmental
test chambers
[NASA-CASE-NPO-10796] c15 N71-27068
Hermetic sealing device for ends of tubular
bodies during materials testing operations
[NASA-CASE-NPO-10431] c15 N71-29132
Hermetically sealed elbow actuator for use in
severe environments
[NASA-CASE-MFS-14710] c09 N72-22195
Heat transfer device
[NASA-CASE-NPO-11120-1] c34 N74-18552
Device for tensioning test specimens within an
hermetically sealed chamber
[NASA-CASE-MFS-23281-1] c35 N77-22450
Cooling system for removing metabolic heat from
an hermetically sealed spacesuit
[NASA-CASE-ARC-11059-1] c54 N78-32721
Hermetic seal for a shaft
[NASA-CASE-NPO-15115-1] c37 N80-25660

HEXAGONS
Hexagon solar power panel
[NASA-CASE-NPO-12148-1] c44 N78-27515

HEXAMETHYLENETETRAAMINE
Structural wood panels with improved fire
resistance
[NASA-CASE-ARC-11174-1] c24 N81-13999

HEXOKINASE
Use of enzyme hexokinase and glucose to reduce
inherent light levels of ATP in luciferase
compositions
[NASA-CASE-XGS-05533] c04 N69-27487

HIGH ACCELERATION
Astronaut restraint suit for high acceleration
protection
[NASA-CASE-XAC-00405] c05 N70-41819
High acceleration cable deployment system
[NASA-CASE-ARC-11256-1] c37 N79-23432

HIGH ALTITUDE
Compact bellows spirometer for high speed and
high altitude space travel
[NASA-CASE-XAR-01547] c05 N69-21473

HIGH ALTITUDE ENVIRONMENTS
Method of making solid propellant rocket motor
having reliable high altitude capabilities,
long shelf life, and capable of firing with
nozzle closure with foamed plastic permanent
mandrel
[NASA-CASE-XLA-04126] c28 N71-26779

HIGH ASPECT RATIO
Aerospace configuration with low and high aspect
ratio variability for high and low speed flight
[NASA-CASE-XLA-00142] c02 N70-33286
Aerodynamic configuration for aircraft capable
of high speed flight and low drag for low
speed takeoff or landing upon presently
existing airfields
[NASA-CASE-XLA-00806] c02 N70-34858

HIGH FREQUENCIES
Apparatus for ballasting high frequency
transistors
[NASA-CASE-XGS-05003] c09 N69-24318
Holder for high frequency crystal resonators
[NASA-CASE-XNP-03637] c15 N71-21311
Multiple varactor for generating high
frequencies with high power and high
conversion efficiency
[NASA-CASE-XNP-04958-1] c10 N71-26414
Filtering technique based on high-frequency
plant modeling for high-gain control
[NASA-CASE-LAR-12215-1] c08 N79-23097

HIGH GAIN
Filtering technique based on high-frequency
plant modeling for high-gain control
[NASA-CASE-LAR-12215-1] c08 N79-23097

HIGH PASS FILTERS
Radio frequency coaxial filter to provide dc
isolation and low frequency signal rejection
in audio range
[NASA-CASE-XGS-01418] c09 N71-23573

HIGH POLYMERS
Shock and vibration damping device using
temperature sensitive solid amorphous polymers
[NASA-CASE-XAC-11225] c14 N69-27486

HIGH POWER LASERS
High power metallic halide laser
[NASA-CASE-NPO-14782-1] c36 N80-18381

HIGH PRESSURE
High-temperature, high-pressure spherical
segment valve
[NASA-CASE-XAC-00074] c15 N70-34817
High pressure four-way valve with O ring adapted
to pass across inlet port
[NASA-CASE-XNP-00214] c15 N70-36908
Compact high pressure filter for rocket fuel lines
[NASA-CASE-XNP-00732] c28 N70-41447
Antiflutter check valve for use with high
pressure fluid flow
[NASA-CASE-XNP-01152] c15 N70-41811
High pressure liquid flow sight assembly for
wide temperature range applications including
cryogenic fluids
[NASA-CASE-XLE-02998] c14 N70-42074
Structural design of high pressure regulator valve
[NASA-CASE-XNP-00710] c15 N71-10778
Hypersonic test facility for studying ablation
in models under high pressure and high
temperature
[NASA-CASE-XLA-00378] c11 N71-15925
Development and characteristics of high pressure
control valve
[NASA-CASE-MSC-11010] c15 N71-19485
Valve seat with resilient support ring for
venting valves subjected to high pressure
sealing loads
[NASA-CASE-XKS-02582] c15 N71-21234
Apparatus and method capable of receiving large
quantity of high pressure helium, removing
impurities, and discharging at received pressure
[NASA-CASE-XNP-06888] c15 N71-24044
Liquid aerosol dispenser with explosively driven
piston to compress light gas to extremely high
pressure
[NASA-CASE-MFS-20829] c12 N72-21310
Gas compression apparatus
[NASA-CASE-MSC-14757-1] c35 N78-10428
Purging means and method for Xenon arc lamps
[NASA-CASE-NPO-11978] c31 N78-17238
Shaft seal assembly for high speed and high
pressure applications
[NASA-CASE-LEW-11873-1] c37 N79-22475

HIGH RESOLUTION
High resolution radar transmitting system for
transmitting optical pulses to targets
[NASA-CASE-NPO-11426] c07 N73-26119
High resolution Fourier
interferometer-spectrophotopolarimeter
[NASA-CASE-NPO-13604-1] c35 N76-31490
High resolution threshold photoelectron
spectroscopy by electron attachment
[NASA-CASE-NPO-14078-1] c72 N80-14877
Interferometer --- high resolution
[NASA-CASE-NPO-14448-1] c74 N81-29963

HIGH SPEED
Compact bellows spirometer for high speed and
high altitude space travel
[NASA-CASE-XAR-01547] c05 N69-21473
High speed low level voltage commutating switch
[NASA-CASE-XAC-00060] c09 N70-39915
Impact testing machine for imparting large
impact forces on high velocity packages
[NASA-CASE-XNP-04817] c14 N71-23225
Flow meter for measuring stagnation pressure in
boundary layer around high speed flight vehicle
[NASA-CASE-XFR-02007] c12 N71-24692
Method for reducing mass of ball bearings for
long life operation at high speed
[NASA-CASE-LEW-10856-1] c15 N72-22490
Two stage light gas-plasma projectile accelerator
[NASA-CASE-MFS-22287-1] c75 N76-14931
Selective data segment monitoring system ---
using shift registers
[NASA-CASE-ARC-10899-1] c60 N77-19760
Shaft seal assembly for high speed and high
pressure applications
[NASA-CASE-LEW-11873-1] c37 N79-22475
High speed, glitch-free digital to analog
converter
[NASA-CASE-GSC-12319-1] c60 N79-32852

HIGH SPEED CAMERAS
Electrically operated rotary shutter for
television camera aboard spacecraft
[NASA-CASE-XNP-00637] c14 N70-40273

HIGH STRENGTH

Method for making fiber composites with high strength at high temperatures
[NASA-CASE-LEW-10424-2-2] c18 N72-25539

HIGH STRENGTH ALLOYS

High strength, corrosion resistant cobalt-based alloys for aerospace structures
[NASA-CASE-XLE-00726] c17 N71-15644
High strength aluminum casting alloy for cryogenic applications in aerospace engineering
[NASA-CASE-XMF-02786] c17 N71-20743
Production of high strength refractory compounds and microconstituents into refractory metal matrix
[NASA-CASE-XLE-03940] c18 N71-26153
High strength nickel based alloys
[NASA-CASE-LEW-10874-1] c17 N72-22535
Cobalt-tungsten alloys with superior strength at elevated temperatures
[NASA-CASE-LEW-10436-1] c17 N73-32415
High toughness-high strength iron alloy
[NASA-CASE-LEW-12542-3] c26 N80-32484

HIGH STRENGTH STEELS

Prevention of hydrogen embrittlement of high strength steel by hydrazine compositions --- by adding potassium hydroxide to hydrazine
[NASA-CASE-NPO-12122-1] c24 N76-14203
High toughness-high strength iron alloy
[NASA-CASE-LEW-12542-1] c26 N77-24254
Process for making a high toughness-high strength iron alloy
[NASA-CASE-LEW-12542-2] c26 N79-22271

HIGH TEMPERATURE

High temperature source of thermal radiation
[NASA-CASE-XLE-00490] c33 N70-34545
Thermonic diode switch for use in high temperature region to chop current from dc source
[NASA-CASE-NPO-10404] c03 N71-12255
Hypersonic test facility for studying ablation in models under high pressure and high temperature
[NASA-CASE-XLA-00378] c11 N71-15925
Process for fiberizing ceramic materials with high fusion temperatures and tensile strength
[NASA-CASE-XNP-00597] c18 N71-23088
Induction heating of metallurgical specimens to high temperatures in coil furnace
[NASA-CASE-XLE-04026] c14 N71-23267
Method of forming ceramic to metal seals impervious to gaseous and liquid mercury at high temperature
[NASA-CASE-XNP-01263-2] c15 N71-26312
Method for making fiber composites with high strength at high temperatures
[NASA-CASE-LEW-10424-2-2] c18 N72-25539
Superalloys from prealloyed powders at high temperatures
[NASA-CASE-LEW-10805-1] c15 N73-13465
High temperature beryllium oxide capacitor
[NASA-CASE-LEW-11938-1] c33 N76-15373
Low to high temperature energy conversion system
[NASA-CASE-NPO-13510-1] c44 N77-32581
Thermocouples of molybdenum and iridium alloys for more stable vacuum-high temperature performance
[NASA-CASE-LEW-12174-2] c35 N79-14346

HIGH TEMPERATURE AIR

Apparatus and method for generating large mass flow of high temperature air at hypersonic speeds
[NASA-CASE-LAR-10612-1] c12 N73-28144

HIGH TEMPERATURE ENVIRONMENTS

High speed infrared furnace
[NASA-CASE-XLE-10466] c17 N69-25147
Nickel alloy series for aerospace structures subjected to high temperatures
[NASA-CASE-XLE-00283] c17 N70-36616
Water cooled gage for strain measurements in high temperature environments
[NASA-CASE-XNP-09205] c14 N71-17657
Trielectrode capacitive pressure transducer
[NASA-CASE-ARC-10711-2] c33 N76-21390
Integrated structure vacuum tube
[NASA-CASE-ARC-10445-1] c31 N76-31365
High temperature penetrator assembly with bayonet plug and ramp-activated lock
[NASA-CASE-MSC-18526-1] c35 N80-19468

Installing fiber insulation
[NASA-CASE-MSC-16973-1] c37 N81-14317
A method and technique for installing light-weight fragile, high-temperature fiber insulation --- spacecraft heat sealing
[NASA-CASE-MSC-16934-2] c37 N81-16468
Corrosion resistant thermal barrier coating --- protecting gas turbines and other engine parts
[NASA-CASE-LEW-13088-1] c26 N81-25188

HIGH TEMPERATURE FLUIDS

Self-cycling fluid heater for heating continuous fluid stream to ultrahigh temperatures to facilitate chemical reactions
[NASA-CASE-MSC-15567-1] c33 N73-16918
High-temperature microphone system --- for measuring pressure fluctuations in gases at high temperature
[NASA-CASE-LAR-12375-1] c32 N79-24203

HIGH TEMPERATURE GASES

Multiple wavelength radiation measuring instrument for determining hot body or gas temperature
[NASA-CASE-XLE-00011] c14 N70-41946
Ablative resins used for retarding regression in ablative material
[NASA-CASE-XLE-05913] c33 N71-14032
Transient heat transfer gage for measuring total radiant intensity from far ultraviolet and ionized high temperature gases
[NASA-CASE-XNP-09802] c33 N71-15641
Generation of high temperature, high mass flow, and high Reynolds number air at hypersonic speeds
[NASA-CASE-LAR-10578-1] c12 N73-25262
Isotope separation using metallic vapor lasers
[NASA-CASE-NPO-13550-1] c36 N77-26477
Start up system for hydrogen generator used with an internal combustion engine
[NASA-CASE-NFO-13849-1] c28 N80-10374
Free-piston regenerative hot gas hydraulic engine
[NASA-CASE-LEW-12274-1] c37 N80-31790
Curved film cooling admission tube
[NASA-CASE-LEW-13174-1] c34 N81-12363
Hot gas engine with dual crankshafts
[NASA-CASE-NPO-14221-1] c37 N81-25370

HIGH TEMPERATURE LUBRICANTS

Production of barium fluoride-calcium fluoride composite lubricant for bearings or seals
[NASA-CASE-XLE-08511-2] c18 N71-16105
Self lubricating fluoride-metal composite materials for outer space applications
[NASA-CASE-XLE-08511] c18 N71-23710
Method of making bearing materials --- self-lubricating, oxidation resistant composites for high temperature applications
[NASA-CASE-LEW-11930-4] c24 N79-17916

HIGH TEMPERATURE PLASMAS

Apparatus for producing highly conductive, high temperature electron plasma with homogenous temperature and pressure distribution
[NASA-CASE-XLA-00147] c25 N70-34661

HIGH TEMPERATURE PROPELLANTS

Development of system for delivering vaporized mercury to electron bombardment ion engine
[NASA-CASE-NPO-10737] c28 N72-11709

HIGH TEMPERATURE RESEARCH

Gas cooled high temperature thermocouple
[NASA-CASE-XLE-09475-1] c33 N71-15568
Fatigue testing apparatus with light shield and infrared reflector for high temperature evaluation of loaded sheet samples
[NASA-CASE-XLA-01782] c14 N71-26136
High temperature oxidation resistant cermet compositions
[NASA-CASE-NPO-13666-1] c27 N77-13217

HIGH TEMPERATURE TESTS

High-temperature, high-pressure spherical segment valve
[NASA-CASE-XAC-00074] c15 N70-34817
Test apparatus for determining mechanical properties of refractory materials at high temperatures in vacuum or inert atmospheres
[NASA-CASE-XLE-00335] c14 N70-35368
Apparatus for testing metallic and nonmetallic beams or rods by bending at high temperatures in vacuum or inert atmosphere
[NASA-CASE-XLE-01300] c15 N70-41993
Heating and cooling system --- for fatigue test specimens

- [NASA-CASE-LAR-12393-1] c39 N80-25693
Containerless high temperature calorimeter apparatus
[NASA-CASE-MFS-23923-1] c35 N81-19426
- HIGH VACUUM**
Epoxy resin sealing device for electrochemical cells in high vacuum environments
[NASA-CASE-XGS-02630] c03 N71-22574
Device for high vacuum film deposition with electromagnetic ion steering
[NASA-CASE-NPO-10331] c09 N71-26701
Absolute pressure measuring device for measuring gas density level in high vacuum range
[NASA-CASE-LAR-10000] c14 N73-30394
Plasma cleaning device --- designed for high vacuum environments
[NASA-CASE-MFS-22906-1] c75 N78-27913
- HIGH VACUUM ORBITAL SIMULATOR**
Space environmental work simulator with portions of space suit mounted to vacuum chamber wall
[NASA-CASE-XNP-07488] c11 N71-18773
- HIGH VOLTAGES**
Hollow spherical electrode for shielding dielectric junction between high voltage conductor and insulator
[NASA-CASE-XLE-03778] c09 N69-21542
High voltage cable for use in high intensity ionizing radiation fields
[NASA-CASE-XNP-00738] c09 N70-38201
High voltage pulse generator for testing flash and ignition limits of nonmetallic materials in controlled atmospheres
[NASA-CASE-MSC-12178-1] c09 N71-13518
High voltage transistor circuit
[NASA-CASE-XNP-06937] c09 N71-19516
High voltage divider system for attenuating high voltages to convenient levels suitable for introduction to measuring circuits
[NASA-CASE-XLE-02008] c09 N71-21583
High voltage distributor
[NASA-CASE-GSC-11849-1] c33 N76-16332
Sustained arc ignition system
[NASA-CASE-LEW-12444-1] c33 N77-28385
High voltage planar multijunction --- solar cells
[NASA-CASE-LEW-13400-1] c44 N81-16528
- HIGHWAYS**
Traffic survey system --- using optical scanners
[NASA-CASE-MFS-22631-1] c66 N76-19888
- HINGES**
Foldable beam
[NASA-CASE-LAR-12077-1] c31 N81-25259
- HISTOGRAMS**
System for storing histogram data in optimum number of elements
[NASA-CASE-XNP-09785] c08 N69-21928
- HOLDERS**
Water cooled contactors for holding rotating carbon arc anode
[NASA-CASE-XMS-03700] c15 N69-24266
Quick disconnect latch and handle combination for mounting articles on walls or supporting bases in spacecraft under zero gravity conditions
[NASA-CASE-MFS-11132] c15 N71-17649
Holder for high frequency crystal resonators
[NASA-CASE-XNP-03637] c15 N71-21311
Design and construction of mechanical probe for determining if object is properly secured
[NASA-CASE-MFS-20760] c14 N72-33377
Fifth wheel
[NASA-CASE-PRC-10081-1] c37 N77-14477
Combined docking and grasping device
[NASA-CASE-MFS-23088-1] c37 N77-23483
Plural output optometric sample cell and analysis system
[NASA-CASE-NPO-10233-1] c74 N78-33913
Method and apparatus for holding two separate metal pieces together for welding
[NASA-CASE-GSC-12318-1] c37 N80-23655
Liquid immersion apparatus for minute articles
[NASA-CASE-MFS-25363-1] c31 N80-32585
Fixture for environmental exposure of structural materials under compression
[NASA-CASE-LAR-12602-1] c35 N81-19429
Compression test fixture
[NASA-CASE-MSC-18723-1] c39 N81-24470
Head for high speed spinner having a vacuum chuck --- holding silicon dioxide chips for etching
[NASA-CASE-NPO-15227-1] c37 N81-33482
- HOLE DISTRIBUTION (MECHANICS)**
Thermocouple installation
[NASA-CASE-NPO-13540-1] c35 N77-14409
- HOLE MOBILITY**
Hole mobility of deposited semiconductor films in vacuum utilizing thermal gradient
[NASA-CASE-XKS-04614] c15 N69-21460
- HOLLOW**
Dual membrane hollow fiber fuel cell and method of operating same
[NASA-CASE-NPO-13732-1] c44 N79-10513
- HOLLOW CATHODES**
Hydrogen hollow cathode ion source
[NASA-CASE-LEW-12940-1] c72 N80-33186
- HOLOGRAPHIC INTERFEROMETRY**
Interferometric angle monitor
[NASA-CASE-GSC-12614-1] c35 N81-12386
Method of and apparatus for double-exposure holographic interferometry
[NASA-CASE-MFS-25405-1] c35 N81-27459
- HOLOGRAPHY**
Development of focused image holography with extended sources
[NASA-CASE-ERC-10019] c16 N71-15551
Hybrid holographic system using reference, transmitted, and reflected beams simultaneously
[NASA-CASE-MFS-20074] c16 N71-15565
Recording and reconstructing focused image holograms
[NASA-CASE-ERC-10017] c16 N71-15567
Method and means for recording and reconstructing holograms without use of reference beam
[NASA-CASE-ERC-10020] c16 N71-26154
Multiple image storing system for obtaining holographic record on film of high speed projectile
[NASA-CASE-MFS-20596] c14 N72-17324
Thin film analyzer utilizing holographic techniques
[NASA-CASE-MFS-20823-1] c16 N73-30476
Method and apparatus for checking the stability of a setup for making reflection type holograms
[NASA-CASE-MFS-21455-1] c35 N74-15146
Real time moving scene holographic camera system
[NASA-CASE-MFS-21087-1] c35 N74-17153
Holography utilizing surface plasmon resonances
[NASA-CASE-MFS-22040-1] c35 N74-26946
Holographic system for nondestructive testing
[NASA-CASE-MFS-21704-1] c35 N75-25124
Real time, large volume, moving scene holographic camera system
[NASA-CASE-MFS-22537-1] c35 N75-27328
Holographic motion picture camera with Doppler shift compensation
[NASA-CASE-MFS-22517-1] c35 N76-18402
Optical process for producing classification maps from multispectral data
[NASA-CASE-MSC-14472-1] c43 N77-10584
- HONING DEVICES**
Location identification system with ground based transmitter and aircraft borne receiver/decoder
[NASA-CASE-ERC-10324] c07 N72-25173
- HONEYCOMB CORES**
Technique for making foldable, inflatable, plastic honeycomb core panels for use in building and bridge structures, light and radio wave reflectors, and spacecraft
[NASA-CASE-XLA-03492] c15 N71-22713
Heat treatment and tooling for forming shapes from thermosetting honeycomb core sheets
[NASA-CASE-NPO-11036] c15 N72-24522
Honeycomb core structures of minimum surface tubule sections
[NASA-CASE-ERC-10363] c18 N72-25541
- HONEYCOMB STRUCTURES**
Filling honeycomb matrix with deaerated paste filler
[NASA-CASE-XMS-01108] c15 N69-24322
Inflatable honeycomb panel element for lightweight structures usable in space stations and other construction
[NASA-CASE-XLA-00204] c32 N70-36536
Fluid flow control valve for regulating fluids in molecular quantities
[NASA-CASE-XLE-00703] c15 N71-15967
Method and apparatus for fabrication of heat insulating and ablative reentry structure
[NASA-CASE-XMS-02009] c33 N71-20834

- Method for honeycomb panel bonding by thermosetting film adhesive with electrical heat means
[NASA-CASE-XMP-01402] c18 N71-21651
- Development of thermal insulation material for insulating liquid hydrogen tanks in spacecraft
[NASA-CASE-XMP-05046] c33 N71-28692
- Honeycomb panels of minimal surface, periodic tubule layers
[NASA-CASE-ERC-10364] c18 N72-25540
- Development of process for bonding resinous body in cavities of honeycomb structures
[NASA-CASE-MSC-12357] c15 N73-12489
- Insert facing tool --- manually operated cutting tool for forming studs in honeycomb material
[NASA-CASE-MFS-21485-1] c37 N74-25968
- Vacuum pressure molding technique
[NASA-CASE-LAR-10073-1] c37 N76-24575
- Honeycomb-laminate composite structure
[NASA-CASE-ARC-10913-1] c24 N78-15180
- Method of making a composite sandwich lattice structure
[NASA-CASE-LAR-11898-2] c24 N78-17149
- Low density bisaleimide-carbon microballoon composites
[NASA-CASE-ARC-11040-1] c24 N79-16915
- Heat pipe honeycomb panel
[NASA-CASE-LAR-12637-1] c34 N81-12362
- HORIZON SCANNERS**
- Oscillatory electromagnetic mirror drive system for horizon scanners
[NASA-CASE-XLA-03724] c14 N69-27461
- Multi-lobar scan horizon sensor
[NASA-CASE-XGS-00809] c21 N70-35427
- Attitude orientation control of spin stabilized final stage space vehicles, using horizon scanners
[NASA-CASE-XLA-00281] c21 N70-36943
- Clamped amplifier circuit for horizon scanner enabling amplification and accurate measurement of specified parameters
[NASA-CASE-XGS-01784] c10 N71-20782
- Horizon sensor design with digital sampling of spaced radiation-compensated thermopile infrared detectors
[NASA-CASE-XNP-06957] c14 N71-21088
- Method and equipment for locating earth infrared horizon from space, independent of season and latitude
[NASA-CASE-LAR-10726-1] c14 N73-20475
- HORIZONTAL FLIGHT**
- A system for providing an integrated display of instantaneous information relative to aircraft attitude, heading, altitude, and horizontal situation
[NASA-CASE-FRC-11005-1] c06 N79-24588
- HORIZONTAL SPACECRAFT LANDING**
- Delta winged, manned reentry vehicle capable of horizontal glide landing at low speeds
[NASA-CASE-XLA-00241] c31 N70-37586
- HORIZONTAL TAIL SURFACES**
- Development and characteristics of translating horizontal tail assembly for supersonic aircraft
[NASA-CASE-XLA-08801-1] c02 N71-11043
- HORN ANTENNAS**
- Device for improving efficiency of parabolic horn antenna system for linearly polarized signals
[NASA-CASE-XNP-00611] c09 N70-35219
- Device for improving efficiency of parabolic reflector horn for linearly or circularly polarized waves
[NASA-CASE-XNP-00540] c09 N70-35382
- Characteristics of antenna horn feeds consisting of central horn with overlapping peripheral horns
[NASA-CASE-GSC-10452] c07 N71-12396
- Multiple mode horn antenna with radiation pattern of equal beamwidths and suppressed sidelobes
[NASA-CASE-XNP-01057] c07 N71-15507
- Multipurpose microwave antenna, employing dish reflector with plural coaxial horn feeds
[NASA-CASE-NFO-11264] c07 N72-25174
- Horn antenna having V-shaped corrugated slots
[NASA-CASE-LAR-11112-1] c32 N76-15330
- Highly efficient antenna system using a corrugated horn and scanning hyperbolic reflector
[NASA-CASE-NFO-13568-1] c32 N76-21365
- Reflux feed system for dual frequency antenna with frequency cutoff means
[NASA-CASE-NFO-14022-1] c32 N78-31321
- Dual band combiner for horn antenna
[NASA-CASE-NFO-14519-1] c32 N80-23524
- Collapsible corrugated horn antenna
[NASA-CASE-LAR-11745-1] c32 N80-29539
- Multifrequency broadband polarized horn antenna
[NASA-CASE-NFO-14588-1] c32 N81-25278
- HOT CATHODES**
- Improved cathode containing barium carbonate block and heated tungsten screen for electron bombardment ion thruster
[NASA-CASE-XLE-07087] c06 N69-39889
- HOT CORROSION**
- Heat pipes containing alkali metal working fluid
[NASA-CASE-LEW-12253-1] c34 N81-22310
- HOT PRESSING**
- Cermet for nuclear fuel constructed by pressing metal coated ceramic particles in die at temperature to cause bonding of metal coatings, and tested for thermal stability
[NASA-CASE-LEW-10219-1] c18 N71-28729
- Holding fixture for a hot stamping press
[NASA-CASE-GSC-12619-1] c37 N81-16470
- HOT WORKING**
- Hot forming of plastic sheets
[NASA-CASE-XMS-05516] c15 N71-17803
- HOT-WIRE ANEMOMETERS**
- Metallic hot wire anemometer --- for high speed wind tunnel tests
[NASA-CASE-ARC-10911-1] c35 N77-20400
- Method for making a hot wire anemometer and product thereof
[NASA-CASE-ARC-10900-1] c35 N77-24454
- HOT-WIRE FLOWMETERS**
- Hot-wire liquid level detector for cryogenic propellants
[NASA-CASE-XLE-00454] c23 N71-17802
- Flow separation detector
[NASA-CASE-ARC-11046-1] c35 N78-14364
- Hot foil transducer skin friction sensor
[NASA-CASE-LAR-12321-1] c35 N81-12390
- HOUSINGS**
- Sealed housing for protecting electronic equipment against electromagnetic interference
[NASA-CASE-MSC-12168-1] c09 N71-18600
- Open type urine receptacle with tubular housing
[NASA-CASE-MSC-12324-1] c05 N72-22093
- Readily assembled universal environment housing for electronic equipment
[NASA-CASE-KSC-10031] c15 N72-22486
- Gas flow control device, including housing and input port
[NASA-CASE-NFO-11479] c15 N73-13462
- Cryogenic gyroscope housing --- with annular disks for gas spin-up
[NASA-CASE-MFS-21136-1] c35 N74-18323
- Heat transfer device
[NASA-CASE-NFO-11120-1] c34 N74-18552
- Deformable bearing seat
[NASA-CASE-LEW-12527-1] c37 N77-32500
- HOVERING**
- Hovering type flying vehicle design and principle mechanisms for manned or unmanned use
[NASA-CASE-MSC-12111-1] c02 N71-11039
- HUGENIOT EQUATION OF STATE**
- Determining particle density using known material Hugoniot curves
[NASA-CASE-LAR-11059-1] c76 N75-12810
- HULLS (STRUCTURES)**
- Efficient operation of improved hydrofoil design
[NASA-CASE-XLA-00229] c12 N70-33305
- HUMAN BEINGS**
- Method and apparatus for applying compressional forces to skeletal structure of subject to simulate force during ambulatory conditions
[NASA-CASE-ARC-10100-1] c05 N71-24738
- Automatic braking device for rapidly transferring humans or materials from elevated location
[NASA-CASE-XKS-07814] c15 N71-27067
- HUMAN BODY**
- Apparatus for measuring human body mass in zero or reduced gravity environment
[NASA-CASE-XMS-03371] c05 N70-42000
- Electromedical garment, applying vectorcardiologic type electrodes to human

- torsos for data recording during physical activity
[NASA-CASE-XFB-10856] c05 N71-11189
- Thermoregulating with cooling flow pipe network for humans
[NASA-CASE-XMS-10269] c05 N71-24147
- Tilting table for testing human body in variety of positions while exercising on ergometer or other biomedical devices
[NASA-CASE-MFS-21010-1] c05 N73-30078
- Method and system for in vivo measurement of bone tissue using a two level energy source
[NASA-CASE-MSC-14276-1] c52 N77-14737
- HUMAN FACTORS ENGINEERING**
- Shock absorbing couch for body support under high acceleration or deceleration forces
[NASA-CASE-XMS-01240] c05 N70-35152
- Harness assembly adapted to support man on ground based apparatus which simulates weightlessness
[NASA-CASE-MFS-14671] c05 N71-12341
- Multiple circuit switch apparatus requiring minimum hand and eye movement by operator
[NASA-CASE-XAC-03777] c10 N71-15909
- Remote control device operated by movement of finger tips for manual control of spacecraft attitude
[NASA-CASE-XAC-02405] c09 N71-16089
- Design and development of flexible tunnel for use by spacecrews in performing extravehicular activities
[NASA-CASE-MSC-12243-1] c05 N71-24728
- Development of apparatus and method for quantitatively measuring brain activity as automatic indication of sleep state and level of consciousness
[NASA-CASE-MSC-13282-1] c05 N71-24729
- Spacesuit mobility joints
[NASA-CASE-ARC-11058-1] c54 N78-31735
- Spacesuit torso closure
[NASA-CASE-ARC-11100-1] c54 N78-31736
- Apparatus and method of inserting a microelectrode in body tissue or the like using vibration means
[NASA-CASE-NPO-13910-1] c52 N79-27836
- Kinesimetric method and apparatus
[NASA-CASE-MSC-18929-1] c54 N81-15699
- Locking mechanism for orthopedic braces
[NASA-CASE-GSC-12082-2] c52 N81-25661
- Urine collection apparatus --- feminine hygiene
[NASA-CASE-MSC-18381-1] c52 N81-28740
- HUMAN PERFORMANCE**
- Color perception tester for testing color code perceptiveness of individuals
[NASA-CASE-KSC-10278] c05 N72-16015
- HUMAN REACTIONS**
- Reaction tester for testing reaction to light stimuli
[NASA-CASE-MSC-13604-1] c05 N73-13114
- HUMAN WASTES**
- Reduced gravity fecal collector seat and urinal
[NASA-CASE-MFS-22102-1] c54 N74-20725
- Automatic bio waste sampling
[NASA-CASE-MSC-14640-1] c54 N76-14804
- Absorbent product and articles made therefrom --- for collection of human wastes
[NASA-CASE-MSC-18223-1] c24 N81-16127
- HUMIDITY**
- Passive intrusion detection system
[NASA-CASE-NPO-13804-1] c33 N80-23559
- Apparatus for supplying conditioned air at a substantially constant temperature and humidity
[NASA-CASE-GSC-12191-1] c31 N80-32583
- HYBRID COMPUTERS**
- Adaptive voting computer system
[NASA-CASE-MSC-13932-1] c62 N74-14520
- HYBRID PROPELLANTS**
- Liner for hybrid solid propellants to bind propellant to rocket motor case
[NASA-CASE-INP-09744] c27 N71-16392
- HYDRAULIC CONTROL**
- Shear modulated fluid amplifier of high pressure hydraulic vortex amplifier type
[NASA-CASE-MFS-10412] c12 N71-17578
- Throttle valve for regulating fluid flow volume
[NASA-CASE-INP-09698] c15 N71-18580
- Fluidic-thermochronic display device
[NASA-CASE-ERC-10031] c12 N71-18603
- Development and characteristics of variable displacement fluid pump for transforming hydraulic pressures
[NASA-CASE-MFS-20830] c15 N71-30028
- Hydraulic drain means for servo-systems
[NASA-CASE-NPO-10316-1] c37 N77-22479
- HYDRAULIC EQUIPMENT**
- Hydraulic support equipment for full scale dynamic testing of large rocket vehicle under free flight conditions
[NASA-CASE-INP-01772] c11 N70-41677
- Hydraulic support apparatus for dynamic testing of space vehicles under near-free flight conditions
[NASA-CASE-INP-03248] c11 N71-10604
- Hydraulic drive mechanism for leveling isolation platforms
[NASA-CASE-XMS-03252] c15 N71-10658
- Antibacklash circuit for hydraulic drive system
[NASA-CASE-INP-01020] c03 N71-12260
- Hydraulic clamping of sheet stock specimens
[NASA-CASE-XLA-05100] c15 N71-17696
- Design and development of double acting shock absorber for spacecraft docking operations
[NASA-CASE-XMS-03722] c15 N71-21530
- Hydraulic apparatus for casting and molding of liquid polymers
[NASA-CASE-INP-07659] c06 N71-22975
- System to control speed of hydraulically movable members by limiting energy applied to actuators with hydraulic servo loop
[NASA-CASE-ARC-10131-1] c15 N71-27754
- Development of aircraft control system with high performance electrically controlled and mechanically operated hydraulic valves for precise flight operation
[NASA-CASE-XAC-00048] c02 N71-29128
- Development and characteristics of variable displacement fluid pump for transforming hydraulic pressures
[NASA-CASE-MFS-20830] c15 N71-30028
- Design and characteristics of mechanically extended and telescoping boom on crane assembly
[NASA-CASE-NPO-11118] c03 N72-25021
- Design and development of device to prevent geysering during convective circulation of cryogenic fluids
[NASA-CASE-KSC-10615] c15 N73-12486
- Redundant hydraulic control system for actuators with three main valve combination
[NASA-CASE-MFS-20944] c15 N73-13466
- Combined pressure regulator and shutoff valve
[NASA-CASE-NPO-13201-1] c37 N75-15050
- Ultrasonically bonded valve assembly
[NASA-CASE-NPO-13360-1] c37 N75-25185
- Filter regeneration systems --- a system for regenerating a system filter in a fluid flow line
[NASA-CASE-MSC-14273-1] c34 N75-33342
- Quick disconnect filter coupling
[NASA-CASE-MFS-22323-1] c37 N76-14463
- Actuator device for artificial leg
[NASA-CASE-MFS-23225-1] c52 N77-14735
- Phase-angle controller for Stirling engines
[NASA-CASE-NPO-14388-1] c37 N81-17432
- A gas-to-hydraulic power converter
[NASA-CASE-MSC-18794-1] c37 N81-24445
- Underground mineral extraction
[NASA-CASE-NPO-14140-1] c43 N81-26509
- HYDRAULIC FLUIDS**
- Free-piston regenerative hot gas hydraulic engine
[NASA-CASE-LEW-12274-1] c37 N80-31790
- HYDRAZINE ENGINES**
- Reciprocating engines
[NASA-CASE-MSC-16239-1] c37 N81-32510
- HYDRAZINE NITROFORM**
- Solid propellant containing hydrazinium nitroformate oxidizer and polymeric hydrocarbon binder
[NASA-CASE-NPO-12015] c27 N73-16764
- HYDRAZINES**
- Catalyst bed ignition system for hydrazine propellants
[NASA-CASE-INP-00876] c28 N70-41311
- Hydrazine monoperfluoro alkanoate solder flux leaving corrosion resistant coating, for metals such as copper
[NASA-CASE-INP-03459-2] c18 N71-15688

- Prevention of hydrogen embrittlement of high strength steel by hydrazine compositions --- by adding potassium hydroxide to hydrazine [NASA-CASE-NPO-12122-1] c24 N76-14203
- HYDROCARBON COMBUSTION**
In-situ laser retorting of oil shale [NASA-CASE-LEW-12217-1] c43 N78-14452
- HYDROCARBON FUEL PRODUCTION**
Molten salt pyrolysis of latex --- synthetic hydrocarbon fuel production using the Guayule shrub [NASA-CASE-NPO-14315-1] c27 N81-17261
- HYDROCARBON FUELS**
Apparatus for producing hydrocarbon slurry containing small particles of magnesium for use as jet aircraft fuel [NASA-CASE-XLE-00010] c15 N70-33382
Hydrogen rich gas generator [NASA-CASE-NPO-13342-2] c44 N76-29700
Hydrogen rich gas generator [NASA-CASE-NPO-13464-2] c44 N76-29704
- HYDROCARBONS**
Solid propellant containing hydrazinium nitroformate oxidizer and polymeric hydrocarbon binder [NASA-CASE-NPO-12015] c27 N73-16764
Hydrogen rich gas generator [NASA-CASE-NPO-13342-1] c37 N76-16446
Combustion engine --- for air pollution control [NASA-CASE-NPO-13671-1] c37 N77-31497
Curable liquid hydrocarbon prepolymers containing hydroxyl groups and process for producing same [NASA-CASE-NPO-13137-1] c27 N80-32514
- HYDROCHLORIC ACID**
Indicator providing continuous indication of the presence of a specific pollutant in air [NASA-CASE-NPO-13474-1] c45 N76-21742
- HYDROFOILS**
Efficient operation of improved hydrofoil design [NASA-CASE-XLA-00229] c12 N70-33305
- HYDROFORMING**
Cold metal hydroforming techniques using epoxy molds for counteracting creep or stretch [NASA-CASE-XLE-05641-1] c15 N71-26346
- HYDROGEN**
Method and transducer device for detecting presence of hydrogen gas [NASA-CASE-XMF-03873] c06 N69-39733
Preventing pressure buildup in electrochemical cells by reacting palladium oxide with evolved hydrogen [NASA-CASE-XGS-01419] c03 N70-41664
Development of pulse-activated polarographic hydrogen detector [NASA-CASE-XMF-06531] c14 N71-17575
Development of device for detecting hydrogen in ambient environments [NASA-CASE-MFS-11537] c14 N71-20442
Gas chromatographic method for analyzing hydrogen deuterium mixtures [NASA-CASE-NPO-11322] c06 N72-25146
Hydrogen fire blink detector for high altitude rocket or ground installation [NASA-CASE-MFS-15063] c14 N72-25412
Separation of dissolved hydrogen from water and coating with palladium black [NASA-CASE-MSC-13335-1] c06 N72-31140
Atomic hydrogen maser with bulb temperature control by output frequency difference signal for wall shift elimination [NASA-CASE-BQN-10654-1] c16 N73-13489
Method of producing a storage bulb for an atomic hydrogen maser [NASA-CASE-NPO-13050-1] c36 N75-15029
Atomic standard with variable storage volume [NASA-CASE-GSC-11895-1] c35 N76-15436
Hydrogen rich gas generator [NASA-CASE-NPO-13342-1] c37 N76-16446
Hydrogen-bromine secondary battery [NASA-CASE-NPO-15237-1] c44 N76-18641
Hydrogen-rich gas generator [NASA-CASE-NPO-13464-1] c44 N76-18642
Solar hydrogen generator [NASA-CASE-LAR-11361-1] c44 N77-22607
Solar photolysis of water [NASA-CASE-NPO-13675-1] c44 N77-32580
Improved synthesis of polyformals [NASA-CASE-ARC-11244-1] c27 N79-30376
- Method and automated apparatus for detecting coliform organisms [NASA-CASE-MSC-16777-1] c51 N80-27067
Method of cross-linking polyvinyl alcohol and other water soluble resins [NASA-CASE-LEW-13103-1] c27 N80-32516
- HYDROGEN ATOMS**
Atomic hydrogen storage method and apparatus [NASA-CASE-LEW-12081-1] c28 N78-24365
Atomic hydrogen storage --- cryotrapping and magnetic field strength [NASA-CASE-LEW-12081-2] c28 N80-20402
Atomic hydrogen storage method and apparatus [NASA-CASE-LEW-12081-3] c28 N81-14103
- HYDROGEN EMBRITTLEMENT**
Prevention of hydrogen embrittlement of high strength steel by hydrazine compositions --- by adding potassium hydroxide to hydrazine [NASA-CASE-NPO-12122-1] c24 N76-14203
- HYDROGEN ENGINES**
Hydrogen-fueled engine [NASA-CASE-NPO-13763-1] c44 N78-33526
- HYDROGEN FUELS**
Hydrogen rich gas generator [NASA-CASE-NPO-13342-2] c44 N76-29700
Hydrogen rich gas generator [NASA-CASE-NPO-13464-2] c44 N76-29704
Hydrogen-rich gas generator [NASA-CASE-NPO-13560-1] c44 N77-10636
- HYDROGEN IONS**
Hydrogen hollow cathode ion source [NASA-CASE-LEW-12940-1] c72 N80-33186
- HYDROGEN OXYGEN FUEL CELLS**
Electrolytically regenerative hydrogen-oxygen fuel cells [NASA-CASE-XLE-04526] c03 N71-11052
Water electrolysis rocket engine with self-regulating stoichiometric fuel mixing regulator [NASA-CASE-XGS-08729] c28 N71-14044
- HYDROGEN PEROXIDE**
Unit for generating thrust from catalytic decomposition of hydrogen peroxide, for high altitude aircraft or spacecraft reaction control [NASA-CASE-XMS-00583] c28 N70-38504
- HYDROGEN PRODUCTION**
Start up system for hydrogen generator used with an internal combustion engine [NASA-CASE-NPO-13849-1] c28 N80-10374
Potential heat exchange fluids for use in sulfuric acid vaporizers [NASA-CASE-NPO-15015-1] c25 N80-23394
- HYDROGENATION**
Producing high purity silicon carbide on carbon base by hydrogen reduction of silicon tetrachloride [NASA-CASE-XLA-00158] c26 N70-36805
Compact hydrogenator [NASA-CASE-NPO-11682-1] c35 N74-15127
- HYDROLOGY**
Radar target for remotely sensing hydrological phenomena [NASA-CASE-LAR-12344-1] c43 N80-18498
- HYDROSTATICS**
Hydrostatic bearing support [NASA-CASE-LEW-11158-1] c37 N77-28486
- HYDROXIDES**
Method for determining presence and type of OH in MgO [NASA-CASE-NPO-10774] c06 N72-17095
- HYGIENE**
Urine collection apparatus --- feminine hygiene [NASA-CASE-MSC-18381-1] c52 N81-28740
- HYGROMETERS**
Polymeric electrolytic hygrometer [NASA-CASE-NPO-13948-1] c35 N78-25391
- HYGROSCOPICITY**
Method of evaluating moisture barrier properties of materials used in electronics encapsulation [NASA-CASE-NPO-10051] c18 N71-24934
- HYPERFINE STRUCTURE**
Process for producing dispersion strengthened nickel with aluminum comprising metallic matrices embedded with oxides or other hyperfine compounds [NASA-CASE-XLE-06969] c17 N71-24142
- HYPERGOLIC ROCKET PROPELLANTS**
Solid propellant ignition with hypergolic fluid injected to predetermined portions of propellant [NASA-CASE-XLE-00207] c28 N70-33375

- Regenerative cooling system for small rocket engine having restart capability and using noncryogenic hypergolic propellants
[NASA-CASE-XLB-00685] c28 N70-41992
- Method for igniting solid propellant rocket motors by injecting hypergolic fluids
[NASA-CASE-XLE-01988] c27 N71-15634
- HYPERSONIC AIRCRAFT**
- Multistage aerospace craft --- perspective drawings of conceptual design
[NASA-CASE-XMF-02263] c05 N74-10907
- HYPERSONIC FLIGHT**
- Hypersonic airbreathing missile
[NASA-CASE-LAR-12264-1] c15 N78-32168
- HYPERSONIC FLOW**
- Design of hypersonic test facility for ablation tests and performance tests of vehicles under conditions of high temperature and pressure
[NASA-CASE-XLA-05378] c11 N71-21475
- HYPERSONIC SPEED**
- Leading edge design for hypersonic reentry vehicles
[NASA-CASE-XLA-00165] c31 N70-33242
- Aerospace vehicle with variable planform for hypersonic and subsonic flight
[NASA-CASE-XLA-00805] c31 N70-38010
- Variable geometry manned orbital vehicle having high aerodynamic efficiency over wide speed range and incorporating auxiliary pivotal wings
[NASA-CASE-XLA-03691] c31 N71-15674
- Supersonic or hypersonic vehicle control system comprising elevons with hinge line sweep and free of adverse aerodynamic cross coupling
[NASA-CASE-XLA-08967] c02 N71-27088
- Generation of high temperature, high mass flow, and high Reynolds number air at hypersonic speeds
[NASA-CASE-LAR-10578-1] c12 N73-25262
- Apparatus and method for generating large mass flow of high temperature air at hypersonic speeds
[NASA-CASE-LAR-10612-1] c12 N73-28144
- HYPERSONIC VEHICLES**
- Carbon dioxide purge systems to prevent condensation in spaces between cryogenic fuel tanks and hypersonic vehicle skin
[NASA-CASE-XLA-01967] c31 N70-42015
- HYPERSONIC WIND TUNNELS**
- A rectangular rod-wall sound shield
[NASA-CASE-LAR-12883-1] c09 N81-29138
- HYPERVELOCITY GUNS**
- Method and apparatus for use in forming highly collimated beam of microparticles with high charge to mass ratio and injecting beam into electrostatic accelerating tube
[NASA-CASE-IGS-06628] c24 N71-16213
- Implosion driven, light gas, hypervelocity gun
[NASA-CASE-XAC-05902] c11 N71-18578
- Collapsible piston for hypervelocity gun
[NASA-CASE-MSC-13789-1] c11 N73-32152
- Hypervelocity gun --- using both electric and chemical energy for projectile propulsion
[NASA-CASE-XLB-03186-1] c09 N79-21084
- HYPERVELOCITY IMPACT**
- Method of and device for determining the characteristics and flux distribution of micrometeorites --- scanning puncture holes in sheet material with photoelectric cell
[NASA-CASE-NPO-12127-1] c91 N74-13130
- HYPERVELOCITY PROJECTILES**
- Impact measuring technique for determining size of hypervelocity projectiles
[NASA-CASE-LAR-10913] c14 N72-16282
- Multiple image storing system for obtaining holographic record on film of high speed projectile
[NASA-CASE-NFS-20596] c14 N72-17324
- HYPERVELOCITY WIND TUNNELS**
- Hypersonic test facility for studying ablation in models under high pressure and high temperature
[NASA-CASE-XLA-00378] c11 N71-15925
- Design of hypersonic test facility for ablation tests and performance tests of vehicles under conditions of high temperature and pressure
[NASA-CASE-XLA-05378] c11 N71-21475
- HYSTERESIS**
- Belleville spring assembly with elastic guides having low hysteresis
[NASA-CASE-XNP-09452] c15 N69-27504
- IGNITERS**
- Characteristics of solid propellant rocket engine with controlled rate of thrust buildup operating in vacuum environment
[NASA-CASE-NPO-11559] c28 N73-24784
- Remote fire stack igniter --- with solenoid-controlled valve
[NASA-CASE-MFS-21675-1] c25 N74-33378
- Molded composite pyrogen igniter for rocket motors --- solid propellant ignition
[NASA-CASE-LAR-12018-1] c20 N78-24275
- Plasma igniter for internal combustion engine
[NASA-CASE-NPO-13828-1] c37 N79-11405
- IGNITION**
- Magnetically controlled plasma accelerator capable of ignition in low density gaseous environment
[NASA-CASE-XLA-00327] c25 N71-29184
- IGNITION LIMITS**
- High voltage pulse generator for testing flash and ignition limits of nonmetallic materials in controlled atmospheres
[NASA-CASE-MSC-12178-1] c09 N71-13518
- IGNITION SYSTEMS**
- Solid propellant ignition with hypergolic fluid injected to predetermined portions of propellant
[NASA-CASE-XLB-00207] c28 N70-33375
- Ignition system for monopropellant combustion devices
[NASA-CASE-XNP-00249] c28 N70-38249
- Igniter capsule for chemical ignition of liquid rocket propellants
[NASA-CASE-XLB-00323] c28 N70-38505
- Catalyst bed ignition system for hydrazine propellants
[NASA-CASE-XNP-00876] c28 N70-41311
- Sustained arc ignition system
[NASA-CASE-LEW-12444-1] c33 N77-28385
- IGNITION TEMPERATURE**
- Test chamber for determining decomposition and autoignition of materials used in spacecraft under controlled environmental conditions
[NASA-CASE-KSC-10198] c11 N71-28629
- ILLUMINATORS**
- Camera adapter design for image magnification including lens and illuminator
[NASA-CASE-XNP-03844-1] c14 N71-26474
- Illumination system design for use as sunlight simulator in space environment simulators with multiple light sources reflected to single virtual source
[NASA-CASE-HQN-10781] c23 N71-30292
- Focal plane array optical proximity sensor
[NASA-CASE-NPO-15155-1] c74 N81-22894
- IMAGE CONTRAST**
- Video signal enhancement of signal component representing brightness of scene element in low contrast
[NASA-CASE-NPO-10343] c07 N71-27341
- Method and apparatus for producing an image from a transparent object
[NASA-CASE-GSC-11989-1] c74 N77-28932
- IMAGE CONVERTERS**
- Deep trap, laser activated image converting system
[NASA-CASE-NPO-13131-1] c36 N75-19652
- Resistive anode image converter
[NASA-CASE-HQN-10876-1] c33 N76-27473
- Wedge immersed thermistor bolometers
[NASA-CASE-IGS-01245-1] c35 N79-33449
- Photocapacitive image converter
[NASA-CASE-LAR-12513-1] c33 N80-28635
- IMAGE CORRELATORS**
- Multiple pattern holographic information storage and readout system
[NASA-CASE-ERC-10151] c16 N71-29131
- Automatic focus control for facsimile cameras
[NASA-CASE-LAR-11213-1] c35 N75-15014
- Azimuth correlator for real-time synthetic aperture radar image processing
[NASA-CASE-NPO-14019-1] c32 N79-14268
- An electro-optical Doppler tracker means and method for optical correlation of synthetic aperture radar data
[NASA-CASE-NPO-14998-1] c33 N81-15194

- Optical signature generating and correlating apparatus
[NASA-CASE-NPO-15226-1] c74 N81-19899
- IMAGE DISSECTOR TUBES**
Apparatus for calibrating an image dissector tube
[NASA-CASE-MFS-22208-1] c33 N75-26244
Electronic optical transfer function analyzer
[NASA-CASE-MFS-21672-1] c74 N76-19535
- IMAGE ENHANCEMENT**
Electron beam scanning system for improved image definition and reduced power requirements for video signal transmission
[NASA-CASE-ERC-10552] c09 N71-12539
Physical correction filter for improving the optical quality of an image
[NASA-CASE-HQN-10542-1] c74 N75-25706
Method of obtaining intensified image from developed photographic films and plates
[NASA-CASE-MFS-23461-1] c35 N79-10389
- IMAGE FILTERS**
Filter arrangement for controlling light intensity in motion picture camera used in optical pyrometry
[NASA-CASE-XLA-00062] c14 N70-33254
Development and characteristics of spectroradiometer with wedge filters to eliminate adverse effect of pinholes in filters
[NASA-CASE-HQN-10683] c14 N71-34389
Physical correction filter for improving the optical quality of an image
[NASA-CASE-HQN-10542-1] c74 N75-25706
- IMAGE INTENSIFIERS**
Magnifying image intensifier
[NASA-CASE-GSC-12010-1] c74 N78-18905
Method of obtaining intensified image from developed photographic films and plates
[NASA-CASE-MFS-23461-1] c35 N79-10389
- IMAGE PROCESSING**
Azimuth correlator for real-time synthetic aperture radar image processing
[NASA-CASE-NPO-14019-1] c32 N79-14268
Interleaving device
[NASA-CASE-GSC-12111-2] c33 N81-29342
- IMAGE RESOLUTION**
An image readout device with electrically variable spatial resolution
[NASA-CASE-LAR-12633-1] c35 N80-22661
- IMAGE TUBES**
Image tube --- deriving electron beam replica of image
[NASA-CASE-GSC-11602-1] c33 N74-21850
System for producing chroma signals
[NASA-CASE-MSC-14683-1] c74 N77-18893
- IMAGES**
Camera adapter design for image magnification including lens and illuminator
[NASA-CASE-XMP-03844-1] c14 N71-26474
Stereoscopic television system, including projecting pair of binocular images
[NASA-CASE-ARC-10160-1] c23 N72-27728
- IMAGING TECHNIQUES**
Highly stable optical mirror assembly optimizing image quality of light diffraction patterns
[NASA-CASE-ERC-10001] c23 N71-24668
Noise elimination in coherent imaging system by axial rotation of optical lens for spectral distribution of degrading affects
[NASA-CASE-GSC-11133-1] c23 N72-11568
Phototransistor imaging system with mosaic of phototransistors on semiconductor substrate
[NASA-CASE-MFS-20809] c23 N73-13660
Computerized optical system for producing multiple images of a scene simultaneously
[NASA-CASE-MSC-12404-1] c23 N73-13661
Optical imaging system for increasing light absorption efficiency of imaging detector
[NASA-CASE-ARC-10194-1] c23 N73-20741
Ritchey-Chretien telescope responsive to images located off telescope optical axis
[NASA-CASE-GSC-11487-1] c14 N73-30393
Data storage, image tube type
[NASA-CASE-MSC-14053-1] c60 N74-12888
Optical instruments
[NASA-CASE-MSC-14096-1] c74 N74-15095
Electron microscope aperture system
[NASA-CASE-ARC-10448-3] c35 N77-14408
Method and apparatus for producing an image from a transparent object
[NASA-CASE-GSC-11989-1] c74 N77-28932
- Full color hybrid display for aircraft simulators --- landing aids
[NASA-CASE-ARC-10903-1] c09 N78-18083
Chromatically corrected virtual image display --- lens design for flight simulators
[NASA-CASE-LAR-12251-1] c74 N79-14892
Multispectral imaging and analysis system --- using charge coupled devices and linear arrays
[NASA-CASE-NPO-13691-1] c43 N79-17288
System and method for obtaining wide screen Schlieren photographs
[NASA-CASE-NPO-14174-1] c74 N79-20856
Low intensity X-ray and gamma-ray imaging device --- fiber optics
[NASA-CASE-GSC-12263-1] c74 N79-20857
Diffraction grating configuration for X-ray and ultraviolet focusing
[NASA-CASE-GSC-12357-1] c74 N80-21140
Low intensity X-ray and gamma-ray imaging spectrometer
[NASA-CASE-GSC-12587-1] c35 N80-29635
Multispectral scanner optical system
[NASA-CASE-MSC-18255-1] c74 N80-33210
System for forming a quadrified image comprising angularly related fields of view of a three dimensional object
[NASA-CASE-NPO-14219-1] c74 N81-17886
Time delay and integration detectors using charge transfer devices
[NASA-CASE-GSC-12324-1] c33 N81-33403
- IMIDES**
Synthesis and chemical properties of imidazopyrrolone/imide copolymers
[NASA-CASE-XLA-08802] c06 N71-11238
Molding process for imidazopyrrolone polymers
[NASA-CASE-LAR-10547-1] c31 N74-13177
Phosphorus-containing imide resins
[NASA-CASE-ARC-11368-1] c27 N81-31364
- IMINES**
Synthesis of polymeric schiff bases by schiff-base exchange reactions
[NASA-CASE-XMP-08651] c06 N71-11236
Direct synthesis of polymeric schiff bases from two amines and two aldehydes
[NASA-CASE-XMP-08655] c06 N71-11239
Synthesis of schiff bases for heat shields by acetal amine reactions
[NASA-CASE-XMP-08652] c06 N71-11243
Synthesis of aromatic diamines and dialdehyde polymers using Schiff base
[NASA-CASE-XMP-03074] c06 N71-24740
- IMMOBILIZATION**
Stretcher with rigid head and neck support with capability of supporting immobilized person in vertical position for removal from vehicle hatch to exterior also useful as splint stretcher
[NASA-CASE-XMP-06589] c05 N71-23159
Absolute focus locking device for microscopes to maintain set focus for extended time period
[NASA-CASE-LAR-10184] c14 N72-22445
Spine immobilization apparatus
[NASA-CASE-ARC-11167-1] c52 N81-25662
- IMPACT**
Shock absorber for use as protective barrier in impact energy absorbing system
[NASA-CASE-NPO-10671] c15 N72-20443
System for detecting impact position of cosmic dust on detector surface
[NASA-CASE-GSC-11291-1] c25 N72-33696
Impact position detector for outer space particles
[NASA-CASE-GSC-11829-1] c35 N75-27331
- IMPACT ACCREBATION**
Suspended mass oscillation damper based on impact energy absorption for damping wind induced oscillations of tall stacks, antennas, and umbilical towers
[NASA-CASE-LAR-10193-1] c15 N71-27146
- IMPACT DAMAGE**
Measuring micrometeoroid depth of penetration into various materials
[NASA-CASE-XLA-00941] c14 N71-23240
- IMPACT LOADS**
Piezoelectric transducer for detecting and measuring micrometeoroids
[NASA-CASE-XAC-01101] c14 N70-41957
Impact testing machine for imparting large impact forces on high velocity packages
[NASA-CASE-XMP-04817] c14 N71-23225

IMPACT RESISTANCE

Electric storage battery with high impact resistance
[NASA-CASE-NPO-11021] c03 N72-20032

Hybrid composite laminate structures
[NASA-CASE-LEW-12118-1] c24 N77-27188

IMPACT STRENGTH
High impact pressure regulator having minimum number of lightweight movable elements
[NASA-CASE-NPO-10175] c14 N71-18625

IMPACT TESTING MACHINES
Development and characteristics of pentrometer for measuring physical properties of lunar surface
[NASA-CASE-XLA-00934] c14 N71-22765

Impact testing machine for imparting large impact forces on high velocity packages
[NASA-CASE-XNP-04817] c14 N71-23225

IMPACT TOLERANCES
High impact antennas with high radiating efficiency
[NASA-CASE-NPO-10231] c07 N71-26101

Vehicle impact absorption system
[NASA-CASE-NPO-14014-1] c37 N79-10420

IMPEDANCE MATCHING
Impedance transformation device for signal mixing
[NASA-CASE-XGS-01110] c07 N65-24334

Reflectometer for receiver input impedance match measurement
[NASA-CASE-XNP-10843] c07 N71-11267

Radio frequency coaxial filter to provide dc isolation and low frequency signal rejection in audio range
[NASA-CASE-XGS-01418] c09 N71-23573

Pattern and impedance matching improvements in transversely polarized triaxial antenna
[NASA-CASE-XGS-02290] c07 N71-28609

Pulse switching for high energy lasers
[NASA-CASE-NPO-14556-1] c36 N79-21336

IMPEDANCE MEASUREMENTS
Development of electrical system for measuring high impedance
[NASA-CASE-XMS-06589-1] c09 N71-20569

Apparatus for measuring semiconductor device resistance
[NASA-CASE-NPO-14424-1] c33 N80-32650

IMPLANTATION
Biotelemetry apparatus with dual voltage generators for implanting in animals
[NASA-CASE-XAC-05706] c05 N71-12342

Magnetic electrical connectors for biomedical percutaneous implants
[NASA-CASE-KSC-11030-1] c52 N77-25772

IMPLANTED ELECTRODES (BIOLOGY)
An implantable electrical device
[NASA-CASE-GSC-12560-1] c52 N80-27073

Pocket ECG electrode
[NASA-CASE-ARC-11258-1] c52 N80-33081

Subcutaneous electrode structure
[NASA-CASE-ARC-11117-1] c52 N81-14612

IMPLOSIONS
Implosion driven, light gas, hypervelocity gun
[NASA-CASE-XAC-05902] c11 N71-18578

IMPREGNATING
Composite lamination method
[NASA-CASE-LAR-12019-1] c24 N78-17150

Insoluble polyelectrolyte and ion-exchange hollow fiber impregnated therewith
[NASA-CASE-NPO-13530-1] c25 N81-17187

IMPULSE GENERATORS
Percutaneous connector device
[NASA-CASE-KSC-10849-1] c52 N77-14738

IMPURITIES
Fabrication of sintered impurity semiconductor brushes for electrical energy transfer
[NASA-CASE-XNP-01016] c26 N71-17618

Method of mitigating titanium impurities effects in p-type silicon material for solar cells
[NASA-CASE-NPO-14635-1] c44 N80-24741

IN-FLIGHT MONITORING
System for use in conducting wake investigation for a wing in flight --- differential pressure measurements for drag investigations
[NASA-CASE-FRC-11024-1] c02 N80-28300

INCIDENCE
Method of and means for testing a glancing-incidence mirror system of an X-ray telescope
[NASA-CASE-MFS-22409-2] c74 N78-15880

INCIDENT RADIATION

Solar cell assembly --- for use under high intensity illumination
[NASA-CASE-LEW-11549-1] c44 N77-19571

INCLINATION
Hingeless helicopter rotor with improved stability
[NASA-CASE-ARC-10807-1] c05 N77-17029

INCOHERENT SCATTERING
Rapidly pulsed, high intensity, incoherent light source
[NASA-CASE-XLE-2529-3] c33 N74-20859

INDICATING INSTRUMENTS
Piezoelectric means for missile stage separation indication and stage initiation
[NASA-CASE-XLA-00791] c03 N70-39930

Inductive liquid level detection system
[NASA-CASE-XLE-01609] c14 N71-10500

Apparatus for determining quality of bond between high density material and low density material
[NASA-CASE-MFS-13686] c15 N71-18132

Device for detecting hydrogen fires onboard high altitude rockets
[NASA-CASE-MFS-13130] c10 N72-17173

Fatigue failure load indicator
[NASA-CASE-LAR-12027-1] c39 N79-22537

INDIUM ALLOYS
Method for attaching a fused-quartz mirror to a conductive metal substrate
[NASA-CASE-MFS-23405-1] c26 N77-29260

Solar cell collector
[NASA-CASE-LEW-12552-1] c44 N78-25527

INDUCTANCE
Current dependent variable inductance for input filter chokes of ac or dc power supplies
[NASA-CASE-ERC-10139] c09 N72-17154

Inductance device with vacuum insulation and materials of low gas entrapping capability
[NASA-CASE-LEW-10330-1] c09 N72-27226

Direct reading inductance meter
[NASA-CASE-NPO-13792-1] c35 N77-32455

INDUCTION HEATING
Induction heating of metallurgical specimens to high temperatures in coil furnace
[NASA-CASE-XLE-04026] c14 N71-23267

Induction heating gun
[NASA-CASE-LAR-12540-1] c37 N80-11468

One step dual purpose joining technique
[NASA-CASE-LAR-12595-1] c37 N80-11469

Apparatus for use in the production of ribbon-shaped crystals from a silicon melt
[NASA-CASE-NPO-14297-1] c33 N81-19389

INDUCTION MOTORS
Voltage controlled oscillator circuit for two-phase induction motor control
[NASA-CASE-MFS-21465-1] c10 N73-32145

Variable frequency inverter for ac induction motors with torque, speed and braking control
[NASA-CASE-MFS-22088-1] c33 N75-15874

Power factor control system for AC induction motors
[NASA-CASE-MFS-23280-1] c33 N78-10376

Magnetic field control --- electromechanical torquing devices
[NASA-CASE-MFS-23828-1] c33 N80-17359

Three phase power factor controller
[NASA-CASE-MFS-25535-1] c33 N81-12330

Power factor control system for ac induction motors
[NASA-CASE-MFS-23988-1] c33 N81-27395

INDUCTORS
Inductive liquid level detection system
[NASA-CASE-XLE-01609] c14 N71-10500

Describing apparatus used in vacuum deposition of thin film inductive windings for spacecraft microcircuitry
[NASA-CASE-XNP-01667] c15 N71-17647

Double-induction variable speed system for constant-frequency electrical power generation
[NASA-CASE-ERC-10065] c09 N71-27364

Elimination of current spikes in buck power converters
[NASA-CASE-NPO-14505-1] c33 N81-19393

INDUSTRIAL PLANTS
Simplified technique and device for producing industrial grade synthetic diamonds
[NASA-CASE-MFS-20698-2] c15 N73-19457

INDUSTRIAL WASTES
Process of forming catalytic surfaces for wet

- oxidation reactions
[NASA-CASE-MSC-14831-1] c25 N78-10225
Process for purification of waste water produced
by a Kraft process pulp and paper mill
[NASA-CASE-NPO-13847-2] c85 N79-17747
- INERTIA**
Gearing system for eliminating backlash and
filtering input torque fluctuations from high
inertia load
[NASA-CASE-XGS-04227] c15 N71-21744
- INERTIAL GUIDANCE**
Hermetically sealed vibration damper design for
use in gimbal assembly of spacecraft inertial
guidance system
[NASA-CASE-MSC-10959] c15 N71-26243
- INERTIAL NAVIGATION**
Autonomous navigation system --- gyroscopic
pendulum for air navigation
[NASA-CASE-ABC-11257-1] c04 N81-21647
- INERTIAL PLATFORMS**
Inertial component clamping assembly design for
spacecraft guidance and control system mounting
[NASA-CASE-XMS-02184] c15 N71-20813
Inertial gimbal alignment system for spacecraft
guidance
[NASA-CASE-XMP-01669] c21 N71-23289
Temperature compensated digital inertial sensor
--- circuit for maintaining inertial element
of gyroscope or accelerometer at constant
position
[NASA-CASE-NPO-13044-1] c35 N74-15694
Attitude control system
[NASA-CASE-MFS-22787-1] c15 N77-10113
Rim inertial measuring system
[NASA-CASE-LAR-12052-1] c18 N81-29152
- INERTIAL REFERENCE SYSTEMS**
Development of attitude control system for
spacecraft orientation
[NASA-CASE-XGS-04393] c21 N71-14159
Large amplitude, linear inertial reference
system of vibrating string type for spacecraft
reference plane
[NASA-CASE-XAC-03107] c23 N71-16698
- INFLATABLE SPACECRAFT**
Passive thermal control coating on aluminum foil
laminate for inflatable spacecraft surfaces
[NASA-CASE-XLA-01291] c33 N70-36617
Erectable, inflatable, radio signal reflecting
passive communication satellite
[NASA-CASE-XLA-00210] c30 N70-40309
Rotating, multisided mandrel for fabricating
gored inflatable spacecraft
[NASA-CASE-XLA-04143] c15 N71-17687
Forming inflatable panels erectable in space for
passive communication satellite
[NASA-CASE-XLA-03497] c15 N71-23652
Development and characteristics of inflatable
structure to provide escape from orbit for
spacecrews under emergency conditions
[NASA-CASE-XMS-06162] c31 N71-28851
- INFLATABLE STRUCTURES**
Aeroflexible wing structure with air scoop for
inflating stiffeners with ram air
[NASA-CASE-XLA-06095] c01 N69-39581
Design of inflatable life raft for aircrafts and
boats
[NASA-CASE-XMS-00863] c05 N70-34857
Lightweight life preserver without fastening
devices
[NASA-CASE-XMS-00864] c05 N70-36493
Inflatable honeycomb panel element for
lightweight structures usable in space
stations and other construction
[NASA-CASE-XLA-00204] c32 N70-36536
Inflatable radar reflector unit - lightweight,
highly reflective to electromagnetic
radiation, and adaptable for erection and
deployment with minimum effort and time
[NASA-CASE-XMS-00893] c07 N70-40063
Temperature sensor warning system for pneumatic
tires of aircraft and ground vehicles
[NASA-CASE-XLA-01926] c14 N71-15620
Inflation system for balloon type satellites
[NASA-CASE-XGS-03351] c31 N71-16081
Development and characteristics of protective
coatings for spacecraft
[NASA-CASE-INP-02507] c31 N71-17679
Development and characteristics of self
supporting space vehicle
[NASA-CASE-XLA-00117] c31 N71-17680
Conforming polisher for aspheric surfaces of
revolution with inflatable tube
[NASA-CASE-XGS-02884] c15 N71-22705
Technique for making foldable, inflatable,
plastic honeycomb core panels for use in
building and bridge structures, light and
radio wave reflectors, and spacecraft
[NASA-CASE-XLA-03492] c15 N71-22713
Collapsible antenna boom and coaxial
transmission line having inflatable inner tube
[NASA-CASE-MFS-20068] c07 N71-27191
Space expandable tether device for use as
passageway between two docked spacecraft
[NASA-CASE-XMS-10993] c15 N71-28936
Inflatable rocket engine nozzle skirt with
transpiration cooling
[NASA-CASE-MFS-20619] c28 N72-11708
Modification of one man life raft
[NASA-CASE-LAR-10241-1] c54 N74-14845
Emergency space-suit helmet
[NASA-CASE-MSC-10954-1] c54 N78-18761
Pressure control valve --- inflating flexible
bladders
[NASA-CASE-ABC-11251-1] c37 N81-17433
Pneumatic inflatable end effector
[NASA-CASE-MFS-23696-1] c54 N81-26718
- INFORMATION RETRIEVAL**
Multiple pattern holographic information storage
and readout system
[NASA-CASE-EBC-10151] c16 N71-29131
- INFRARED DETECTORS**
Temperature sensitive capacitor device for
detecting very low intensity infrared radiation
[NASA-CASE-XNP-09750] c14 N69-39937
Sight switch using infrared source and sensor
mounted beside eye
[NASA-CASE-XMP-03934] c09 N71-22985
Characteristics of infrared photodetectors
manufactured from semiconductor material
irradiated by electron beam
[NASA-CASE-LAR-10728-1] c14 N73-12445
Doped Josephson tunneling junction for use in a
sensitive IR detector
[NASA-CASE-NPO-13348-1] c33 N75-31332
Multispectral scanner optical system
[NASA-CASE-MSC-18255-1] c74 N80-33210
Refrigerator module, system and process ---
regenerative, cryogenic cooling of an infrared
radiation detection system
[NASA-CASE-ABC-11263-1] c31 N81-27328
- INFRARED INSTRUMENTS**
Infrared scanning system for maintaining
spacecraft orientation with earth reference
[NASA-CASE-XLA-00120] c21 N70-33181
- INFRARED INTERFEROMETERS**
Over-under double-pass interferometer
[NASA-CASE-NPO-13999-1] c35 N78-18395
- INFRARED LASERS**
Monitoring atmospheric pollutants with a
heterodyne radiometer transmitter-receiver
[NASA-CASE-NFO-11919-1] c35 N74-11284
Gregorian all-reflective optical system
[NASA-CASE-GSC-12058-1] c74 N77-26942
Thermal compensator for closed-cycle helium
refrigerator --- assuring constant temperature
for an infrared laser diode
[NASA-CASE-GSC-12168-1] c31 N79-17029
- INFRARED RADIATION**
High speed infrared furnace
[NASA-CASE-XLE-10466] c17 N69-25147
High field CdS detector for infrared radiation
[NASA-CASE-LAR-11027-1] c35 N74-18088
- INFRARED REFLECTION**
Electromagnetic radiation energy arrangement ---
coatings for solar energy absorption and
infrared reflection
[NASA-CASE-WOO-00428-1] c32 N79-19186
- INFRARED SCANNERS**
Infrared scanning system for maintaining
spacecraft orientation with earth reference
[NASA-CASE-XLA-00120] c21 N70-33181
Method and equipment for locating earth infrared
horizon from space, independent of season and
latitude
[NASA-CASE-LAR-10726-1] c14 N73-20475
- INFRARED SPECTRA**
Diatomic infrared gasdynamic laser --- for
producing different wavelengths

- [NASA-CASE-ARC-10370-1] c36 N75-31426
INFRARED SPECTROMETERS
 Telespectrograph for analyzing upper atmosphere
 by tracking bodies reentering atmosphere at
 high velocities
 [NASA-CASE-XLA-03273] c14 N71-18699
 Cooled echelle grating spectrometer --- for
 space telescope applications
 [NASA-CASE-NPO-14372-1] c35 N80-26635
INFRARED SPECTROSCOPY
 Apparatus for providing a servo drive signal in
 a high-speed stepping interferometer
 [NASA-CASE-NPO-13569-2] c35 N79-14348
INFRASONIC FREQUENCIES
 Resonant infrasonic gauging device for measuring
 liquid quantity in closed bladderless reservoir
 [NASA-CASE-MSC-11847-1] c14 N72-11363
INHIBITORS
 Inhibited solid propellant composition
 containing beryllium hydride
 [NASA-CASE-NPO-10866-1] c28 N79-14228
INITIATORS (EXPLOSIVES)
 Piezoelectric means for missile stage separation
 indication and stage initiation
 [NASA-CASE-XLA-00791] c03 N70-39930
 Electroexplosive safe-arm initiator using
 electric driven electromagnetic coils and
 magnets to align charge
 [NASA-CASE-LAR-10372] c09 N71-18599
 Electroexplosive device
 [NASA-CASE-NPO-13858-1] c28 N79-11231
INJECTION
 Foam insulation thickness measuring and
 injection device for spacecraft applications
 [NASA-CASE-MPS-20261] c14 N71-27005
INJECTORS
 Propellant injectors for rocket combustion
 chambers
 [NASA-CASE-XLE-00103] c28 N70-33241
 Fuel injection system for maximum combustion
 efficiency of rocket engines
 [NASA-CASE-XLE-00111] c28 N70-38199
 Injector manifold assembly for bipropellant
 rocket engines providing for fuel propellant
 to serve as coolant
 [NASA-CASE-XMP-00148] c28 N70-38710
 Method and apparatus for use in forming highly
 collimated beam of microparticles with high
 charge to mass ratio and injecting beam into
 electrostatic accelerating tube
 [NASA-CASE-XGS-06628] c24 N71-16213
 Control valve and coaxial variable injector for
 controlling bipropellant mixture ratio and flow
 [NASA-CASE-XNP-09702] c15 N71-17654
 Rocket engine injector orifice to accommodate
 changes in density, velocity, and pressure,
 thereby maintaining constant mass flow rate of
 propellant into rocket combustion chamber
 [NASA-CASE-XLE-03157] c28 N71-24736
 Bipropellant injector with pair of concave
 deflector plates
 [NASA-CASE-XNP-09461] c28 N72-23609
 Coaxial injector for mixing liquid propellants
 within combustion chambers
 [NASA-CASE-NPO-11095] c15 N72-25455
 Improved injector with porous plug for bubbles
 of gas into feed lines of electrically
 conductive liquid
 [NASA-CASE-NPO-11377] c15 N73-27406
 Rocket injector head
 [NASA-CASE-XNP-04592-1] c20 N79-21125
INLET FLOW
 High pressure four-way valve with C ring adapted
 to pass across inlet port
 [NASA-CASE-XNP-00214] c15 N70-36908
 Method for maintaining good performance in gas
 turbine during air flow distortion
 [NASA-CASE-XLE-10286-1] c28 N71-28915
 Airflow control system for supersonic inlets
 [NASA-CASE-XLE-11188-1] c02 N74-20646
 Variably positioned guide vanes for aerodynamic
 choking
 [NASA-CASE-LAR-10642-1] c07 N74-31270
 Shock position sensor for supersonic inlets ---
 measuring pressure in the throat of a
 supersonic inlet
 [NASA-CASE-XLE-11915-1] c35 N76-14431
 Method for fabricating a mass spectrometer inlet
 leak
- [NASA-CASE-GSC-12077-1] c35 N77-24455
 Gas turbine engine with recirculating bleed
 [NASA-CASE-XLE-12452-1] c07 N78-25089
 Self stabilizing sonic inlet
 [NASA-CASE-XLE-11890-1] c05 N79-24976
INLET NOZZLES
 Rocket injector head
 [NASA-CASE-XNP-04592-1] c20 N79-21125
INLET PRESSURE
 Fluid jet amplifier with fluid from jet nozzle
 deflected by inlet pressure
 [NASA-CASE-XLE-03512] c12 N69-21466
 Shock position sensor for supersonic inlets ---
 measuring pressure in the throat of a
 supersonic inlet
 [NASA-CASE-XLE-11915-1] c35 N76-14431
INOCULATION
 Automatic inoculating apparatus --- includes
 movable carriage, drive motor, and swabbing
 motor
 [NASA-CASE-LAR-11074-1] c51 N75-13502
INORGANIC COATINGS
 Composition of diffuse reflective coating
 containing sodium chloride in combination with
 diol solvent and organic wetting and drying
 agents
 [NASA-CASE-GSC-11214-1] c06 N73-13128
 Boron trifluoride coatings for thermoplastic
 materials and method of applying same in glow
 discharge
 [NASA-CASE-ABC-11057-1] c27 N78-31233
 Advanced inorganic separators for alkaline
 batteries and method of making same --- a
 polymeric coating applied to a porous flexible
 substrate
 [NASA-CASE-XLE-13171-1] c44 N81-22466
INORGANIC COMPOUNDS
 Inorganic ion exchange membrane electrolytes for
 fuel cell use
 [NASA-CASE-XNP-04264] c03 N69-21337
 Preparation of inorganic solid film lubricants
 with long wear life and stability in aerospace
 environments
 [NASA-CASE-XNP-03988] c15 N71-21403
 Modification of polyurethanes with alkyl halide
 resins, inorganic salts, and encapsulated
 volatile and reactive halogen for fuel fire
 control
 [NASA-CASE-ABC-10098-1] c06 N71-24739
 Inorganic thermal control and solar reflector
 coatings
 [NASA-CASE-MPS-20011] c18 N72-22566
 Inorganic-organic separators for alkaline
 batteries
 [NASA-CASE-XLE-12649-1] c44 N78-25530
 Method for the preparation of inorganic single
 crystal and polycrystalline electronic materials
 [NASA-CASE-XLE-02545-1] c76 N79-21910
 Carboranyl cyclotriphosphazenes and their polymers
 --- thermal insulation
 [NASA-CASE-ABC-11176-1] c27 N80-21533
INORGANIC PEROXIDES
 Process for preparing higher oxides of the
 alkali and alkaline earth metals
 [NASA-CASE-ABC-10992-1] c26 N78-32229
 Process for the preparation of calcium superoxide
 [NASA-CASE-ABC-11053-1] c25 N79-10162
INPUT
 Apparatus for filtering input signals
 [NASA-CASE-NPO-10198] c09 N71-24806
 RC networks with voltage amplifier, RC input
 circuit, and positive feedback
 [NASA-CASE-ABC-10020] c10 N72-17172
 High-speed multiplexing of keyboard
 data inputs
 [NASA-CASE-NPO-14554-1] c60 N81-27814
INPUT/OUTPUT ROUTINES
 Analog to digital converter
 [NASA-CASE-NPO-13385-1] c33 N76-18345
INSERTION
 Apparatus and method of inserting a
 microelectrode in body tissue or the like
 using vibration means
 [NASA-CASE-NPO-13910-1] c52 N79-27836
INSERTION LOSS
 High impedance alternating current sensing
 transformer device between two bolometers for
 measuring insertion loss of test component
 [NASA-CASE-XNP-01193] c10 N71-16057

INSPECTION

Automatic visual inspection system for microelectronics
[NASA-CASE-NPO-13282] c38 N78-17396
System for refurbishing and processing parachutes
[NASA-CASE-KSC-11042-1] c02 N81-14967

INSTALLING

Device for installing rocket engines
[NASA-CASE-NFS-19220-1] c20 N76-22296
Thermocouple installation
[NASA-CASE-NPO-13540-1] c35 N77-14409
A method and technique for installing light-weight fragile, high-temperature fiber insulation --- spacecraft heat sealing
[NASA-CASE-MSC-16934-2] c37 N81-16468

INSTRUMENT ERRORS

Solar radiation direction detector and device for compensating degradation of photocells
[NASA-CASE-XLA-00183] c14 N70-40239

INSTRUMENT FLIGHT RULES

Controlled visibility device for simulating poor visibility conditions in training pilots in instrument landing and flight procedures
[NASA-CASE-XPR-04147] c11 N71-10748

INSTRUMENT ORIENTATION

Sensor consisting of photocells mounted on pyramidal base for improved pointing accuracy of planetary trackers
[NASA-CASE-XNP-04180] c07 N69-39736
Inertial gimbal alignment system for spacecraft guidance
[NASA-CASE-XNP-01669] c21 N71-23289
Optical gauging system for monitoring machine tool alignment
[NASA-CASE-XAC-09489-1] c15 N71-26673
Development of solar energy powered heliotrope assembly to orient solar array toward sun
[NASA-CASE-GSC-10945-1] c21 N72-31637

INSTRUMENT PACKAGES

Apparatus for ejecting covers of instrument packages using differential pressure principle
[NASA-CASE-XNP-04132] c15 N69-27502
Removable potting compound for instrument shock protection
[NASA-CASE-XLA-00482] c15 N70-36409
Plastic foam generator for space vehicle instrument payload package flotation in water landing
[NASA-CASE-XLA-00838] c03 N70-36778
High velocity guidance and spin stabilization gyro controlled jet reaction system for launch vehicle payloads
[NASA-CASE-XLA-01339] c31 N71-15692
Ethylene oxide sterilization and encapsulating process for sterile preservation of instruments and solid propellants
[NASA-CASE-XNP-09763] c14 N71-20461
Thermal control canister
[NASA-CASE-GSC-12253-1] c34 N79-31523

INSTRUMENTS

Method and apparatus for bowing of instrument panels to improve radio frequency shielded enclosure
[NASA-CASE-XNP-09422] c07 N71-19436
Design and development of pressure sensor for measuring differential pressures of few pounds per square inch
[NASA-CASE-XNP-01974] c14 N71-22752
Development of temperature compensated thrust measuring gage for measuring forces as function of time in environment with varying temperature
[NASA-CASE-IGS-02319] c14 N71-22565
Development and characteristics of self-calibrating displacement transducer for measuring magnitude and frequency of displacement of bodies
[NASA-CASE-XLA-00781] c09 N71-22999
Design, development, and characteristics of pressure and temperature sensor operating immersed in fluid flow
[NASA-CASE-LEW-10281-1] c14 N72-17327
Development of apparatus for mounting scientific experiments in spacecraft to permit utilization without maneuvering spacecraft
[NASA-CASE-MSC-12372-1] c31 N72-25842
Magnetic suspension and pointing system
[NASA-CASE-LAR-11889-2] c37 N78-27424

Rotary leveling base platform

[NASA-CASE-ARC-10981-1] c37 N78-27425

INSULATED STRUCTURES

Low thermal loss piping arrangement for moving cryogenic media through double chamber structure
[NASA-CASE-XNP-08882] c15 N69-39935

INSULATION

Electrode attached to helmets for detecting low level signals from skin of living creatures
[NASA-CASE-ARC-10043-1] c05 N71-11193
Characteristics of foamed-in-place ceramic refractory insulating material and method of fabrication
[NASA-CASE-IGS-02435] c18 N71-22998
Method of fabricating equal length insulated wire
[NASA-CASE-PRC-10038] c15 N72-20444
Inductance device with vacuum insulation and materials of low gas entrapping capability
[NASA-CASE-LEW-10330-1] c09 N72-27226
Insulated electrocardiographic electrodes --- without paste electrolyte
[NASA-CASE-MSC-14339-1] c05 N75-24716
Silica reusable surface insulation
[NASA-CASE-ARC-10721-1] c27 N76-22376
Two-component ceramic coating for silica insulation
[NASA-CASE-MSC-14270-1] c27 N76-22377
Three-component ceramic coating for silica insulation
[NASA-CASE-MSC-14270-2] c27 N76-23426
Field effect transistor and method of construction thereof
[NASA-CASE-NFS-23312-1] c33 N78-27326
Cork-resin ablative insulation for complex surfaces and method for applying the same
[NASA-CASE-NFS-23626-1] c24 N80-26388

INSULATORS

High voltage insulators for direct current in acceleration system of electrostatic thruster
[NASA-CASE-XLE-01902] c28 N71-10574
High temperature resistant cermet and ceramic compositions --- for thermal resistant insulators and refractory coatings
[NASA-CASE-NPO-13690-1] c27 N78-19302

INTAKE SYSTEMS

Deflector for preventing objects from entering nacelle inlets of jet aircraft
[NASA-CASE-XLE-00388] c28 N70-34788
The engine air intake system
[NASA-CASE-ARC-10761-1] c07 N77-18154
Fluid sampling device
[NASA-CASE-GSC-12143-1] c35 N77-32456
Passive propellant system
[NASA-CASE-MPS-23642-1] c20 N80-10278
Reciprocating engines
[NASA-CASE-MSC-16239-1] c37 N81-32510

INTEGRATED CIRCUITS

Computer circuit performing both counting and shifting logic operations also capable of miniaturization and integration in basic circuits
[NASA-CASE-XNP-01753] c08 N71-22897
Development and characteristics of electric circuitry for detecting electrical pulses rise time and amplitude
[NASA-CASE-XNP-08804] c09 N71-24717
Method and apparatus for testing integrated circuit microtab welds
[NASA-CASE-ARC-10176-1] c15 N72-21464
Single integrated circuit chip with field effect transistor
[NASA-CASE-GSC-10835-1] c09 N72-33205
Integrated circuit tangnet function generator
[NASA-CASE-MSC-13907-1] c10 N73-26230
Inverted geometry transistor for use with monolithic integrated circuit
[NASA-CASE-ARC-10330-1] c09 N73-32112
Integrated circuit package with lead structure and method of preparing the same
[NASA-CASE-NFS-21374-1] c33 N74-12951
Integrated P-channel MOS gyrator
[NASA-CASE-NFS-22343-1] c33 N74-34638
Four phase logic systems --- including integrated microcircuits
[NASA-CASE-MSC-14240-1] c33 N75-14957
Integrable power gyrator --- with Z-matrix design using parallel transistors
[NASA-CASE-NFS-22342-1] c33 N75-30428

- Cross correlation anomaly detection system
[NASA-CASE-NPO-13283] c38 N78-17395
- Solar cell system having alternating current output
[NASA-CASE-LEW-12806-1] c44 N78-25553
- Complementary DMOS-V MOS integrated circuit structure
[NASA-CASE-GSC-12190-1] c33 N79-12321
- A general logic structure for custom LSI circuits
[NASA-CASE-NPO-14410-1] c33 N79-25314
- Method for analyzing radiation sensitivity of integrated circuits
[NASA-CASE-NPO-14350-1] c33 N80-14332
- Digital demodulator
[NASA-CASE-LAR-12659-1] c33 N80-31731
- Liquid immersion apparatus for minute articles
[NASA-CASE-MFS-25363-1] c31 N80-32585
- Solar cell system having alternating current output
[NASA-CASE-LEW-12806-2] c44 N81-12542
- Microwave integrated circuit for Josephson voltage standards
[NASA-CASE-MFS-23845-1] c33 N81-17348
- High stability amplifier
[NASA-CASE-GSC-12646-1] c33 N81-32391
- INTEGRATORS**
- Solid state operational integrator
[NASA-CASE-NPO-10230] c09 N71-12520
- Variable duration pulse integrator design for integrating pulse duration modulated pulses with elimination of ripple content
[NASA-CASE-XLA-01219] c10 N71-23084
- Solid state integrator for converting variable width pulses into analog voltage
[NASA-CASE-XLA-03356] c10 N71-23315
- Feedback integrating circuit with grounded capacitor for signal processing
[NASA-CASE-XAC-10607] c10 N71-23669
- High speed phase detector design indicating phase relationship between two square wave input signals
[NASA-CASE-XNP-01306-2] c09 N71-24596
- Adaptive control system for line-commutated inverters
[NASA-CASE-MFS-25209-1] c33 N81-31480
- INTERFACIAL TENSION**
- Passive propellant system
[NASA-CASE-MFS-23642-1] c20 N80-10278
- INTERFEROMETERS**
- Describing device for velocity control of electromechanical drive mechanism of scanning mirror of interferometer
[NASA-CASE-XGS-03532] c14 N71-17627
- Incremental motion drive system applied to interferometer components
[NASA-CASE-XNP-08897] c15 N71-17694
- Design and development of optical interferometer with laser light source for application to schlieren systems
[NASA-CASE-XLA-04295] c16 N71-24170
- Digital sensor for counting fringes produced by interferometers with improved sensitivity and one photomultiplier tube to eliminate alignment problem
[NASA-CASE-LAR-10204] c14 N71-27215
- Two beam interferometer-polarimeter
[NASA-CASE-NPO-11239] c14 N73-12446
- Interferometer prism and control system for precisely determining direction to remote light source
[NASA-CASE-ARC-10278-1] c14 N73-25463
- High resolution Fourier interferometer-spectrophotopolarimeter
[NASA-CASE-NPO-13604-1] c35 N76-31490
- Apparatus for providing a servo drive signal in a high-speed stepping interferometer
[NASA-CASE-NPO-13569-2] c35 N79-14348
- Velocity servo for continuous scan Fourier interference spectrometer
[NASA-CASE-NPO-14093-1] c35 N80-20563
- Interferometric angle monitor
[NASA-CASE-GSC-12614-1] c35 N81-12386
- Interferometer
[NASA-CASE-NPO-14502-1] c74 N81-17888
- Dual-beam skin friction interferometer --- portable equipment
[NASA-CASE-ARC-11354-1] c36 N81-29415
- Interferometer --- high resolution
[NASA-CASE-NPO-14448-1] c74 N81-29563
- Optical gyroscope system
[NASA-CASE-NPO-14258-1] c35 N81-33448
- INTERFEROMETRY**
- Surface roughness measuring system --- synthetic aperture radar measurements of ocean wave height and terrain peaks
[NASA-CASE-NPO-13862-1] c35 N79-10391
- Interferometric locating system
[NASA-CASE-NPO-14173-1] c04 N80-32359
- INTERLAYERS**
- Method of making a partial interlaminar separation composite system
[NASA-CASE-LAR-12065-2] c24 N81-33235
- INTERMEDIATE FREQUENCIES**
- Doppler radar having phase modulation of both transmitted and reflected return signals --- ranging
[NASA-CASE-MSC-18675-1] c32 N81-29312
- INTERMEDIATE FREQUENCY AMPLIFIERS**
- Multichannel logarithmic RF level detector
[NASA-CASE-LAR-11021-1] c32 N76-14321
- INTERMETALLICS**
- Controlled diffusion reaction process for masking substrate of twisted multifilament superconductive ribbon
[NASA-CASE-LEW-11726-1] c26 N73-26752
- Production of intermetallic compounds by effect of shock waves from explosions and compaction of powder
[NASA-CASE-MFS-20861-1] c18 N73-32437
- INTERNAL COMBUSTION ENGINES**
- Variable displacement fuel pump for internal combustion engines
[NASA-CASE-MSC-12139-1] c28 N71-14058
- Detonation reaction engine comprising outer housing enclosing pair of inner walls for continuous flow
[NASA-CASE-XNP-06926] c28 N71-22983
- Development of system for preheating vaporized fuel for use with internal combustion engines
[NASA-CASE-NPO-12072] c28 N72-22772
- System for minimizing internal combustion engine pollution emission
[NASA-CASE-NPO-13402-1] c37 N76-18457
- Combustion engine --- for air pollution control
[NASA-CASE-NPO-13671-1] c37 N77-31497
- Hydrogen-fueled engine
[NASA-CASE-NPO-13763-1] c44 N78-33526
- Plasma igniter for internal combustion engine
[NASA-CASE-NPO-13828-1] c37 N79-11405
- Indicated mean-effective pressure instrument
[NASA-CASE-LEW-12661-1] c35 N79-14345
- Start up system for hydrogen generator used with an internal combustion engine
[NASA-CASE-NPO-13849-1] c28 N80-10374
- Supercritical fuel injection system
[NASA-CASE-LEW-12990-1] c07 N81-29129
- Automatic compression adjusting mechanism for internal combustion engines
[NASA-CASE-MSC-18807-1] c37 N81-29442
- INTERPLANETARY SPACE**
- Compact heat shielding for interplanetary space vehicles
[NASA-CASE-XNS-00486] c33 N70-33344
- Active RC filter networks and amplifiers for deep space magnetic field measurement
[NASA-CASE-XAC-05462-2] c10 N72-17171
- INTERPLANETARY SPACECRAFT**
- Transpirationally cooled heat ablation system for interplanetary spacecraft reentry shielding
[NASA-CASE-XNS-02677] c31 N70-42075
- INTERPLANETARY TRAJECTORIES**
- Table structure and rotating magnet system simulating gravitational forces on spacecraft and displaying trajectories between Earth, Venus, and Mercury
[NASA-CASE-XNP-00708] c14 N70-35394
- INTRACRANIAL PRESSURE**
- Induction powered biological radiosonde
[NASA-CASE-ARC-11120-1] c52 N80-18691
- INTRAOCULAR PRESSURE**
- Intra-ocular pressure normalization technique and equipment
[NASA-CASE-LEW-12955-1] c52 N80-14684
- Intra-ocular pressure normalization technique and equipment
[NASA-CASE-LEW-12723-1] c52 N80-18690
- INTRAVEHICULAR ACTIVITY**
- Intra- and extravehicular life support space

- suite for Apollo astronauts
[NASA-CASE-MSC-12609-1] c05 N73-32012
- INTRAVENOUS PROCEDURES**
Biomedical flow sensor --- intravenous procedures
[NASA-CASE-MSC-18761-1] c52 N81-24717
- INTRUSION**
Passive intrusion detection system
[NASA-CASE-NPO-13804-1] c33 N80-23559
- INVENTIONS**
Active notch filter network with variable notch depth, width and frequency
[NASA-CASE-FRC-11055-1] c33 N80-29583
Superconducting gyrocon for high power high efficiency microwave generator/amplifier application
[NASA-CASE-NPO-14975-1] c33 N80-29584
Pressure suit joint analyzer
[NASA-CASE-ARC-11314-1] c54 N80-30043
Ion-exchange hollow fibers
[NASA-CASE-NPO-13309-1] c25 N81-19244
Waveguide cooling system
[NASA-CASE-NPO-15401-1] c33 N81-29344
- INVERTED CONVERTERS (DC TO AC)**
Inverter ratio failure detector
[NASA-CASE-NPO-13160-1] c35 N74-18090
Variable frequency inverter for ac induction motors with torque, speed and braking control
[NASA-CASE-MFS-22088-1] c33 N75-15674
Solar cell system having alternating current output
[NASA-CASE-LEW-12806-2] c44 N81-12542
- INVERTERS**
Silicon controlled rectifier inverter with compensation of transients to avoid false gating
[NASA-CASE-XLA-08507] c09 N69-39984
Inverter oscillator with voltage feedback
[NASA-CASE-NPO-10760] c09 N72-25254
Overload protection system for power inverter
[NASA-CASE-NPO-13872-1] c33 N78-10377
Module failure isolation circuit for paralleled inverters --- preventing system failure during power conditioning for spacecraft applications
[NASA-CASE-NPO-14000-1] c33 N79-24254
Base drive for paralleled inverter systems
[NASA-CASE-NPO-14163-1] c33 N81-14220
Adaptive control system for line-commutated inverters
[NASA-CASE-MFS-25209-1] c33 N81-31480
Adaptive reference voltage generator for firing angle control of line-commutated inverters
[NASA-CASE-MFS-25215-1] c33 N81-31481
- IODINE**
Method of producing output voltage from photovoltaic cell using poly-N-vinyl carbazole complexed with iodine
[NASA-CASE-NPO-10373] c03 N71-18698
Gallium arsenide solar cell preparation by surface deposition of cuprous iodide on thin n-type polycrystalline layers and heating in iodine vapor
[NASA-CASE-XNP-01960] c09 N71-23027
Iodine generator for reclaimed water purification
[NASA-CASE-MSC-14632-1] c54 N78-14784
- IODINE COMPOUNDS**
Perfluoroalkyl polytriazines containing pendent iododifluoromethyl groups
[NASA-CASE-ARC-11241-1] c25 N81-14616
- IODINE ISOTOPES**
Production of I-123 for use as radiopharmaceutical for low radiation exposure
[NASA-CASE-LEW-10518-1] c24 N72-33681
Method of producing I-123 --- by bombardment of cesium causing spallation
[NASA-CASE-LEW-11390-2] c25 N76-27383
Production of I-123
[NASA-CASE-LEW-11390-3] c25 N76-29379
- ION ACCELERATORS**
Helium outgassing process for fused glass coating on ion accelerator grid
[NASA-CASE-LEW-10278-1] c15 N71-28582
- ION BEAMS**
Ion beam deflector system for electronic thrust vector control for ion propulsion yaw, pitch, and roll forces
[NASA-CASE-LEW-10689-1] c28 N71-26173
Dispensing targets for ion beam particle generators
[NASA-CASE-NPO-13112-1] c73 N74-26767
- Sputtering holes with ion beamlets
[NASA-CASE-LEW-11646-1] c20 N74-31269
Method of constructing dished ion thruster grids to provide hole array spacing compensation
[NASA-CASE-LEW-11876-1] c20 N76-21276
Ion beam thruster shield
[NASA-CASE-LEW-12082-1] c20 N77-10148
Targets for producing high purity I-123
[NASA-CASE-LEW-10518-3] c25 N78-27226
Method of cold welding using ion beam technology
[NASA-CASE-LEW-12982-1] c37 N81-19455
- ION CHARGE**
Quadrupole mass spectrometer using noise spectrum for ion separation and identification
[NASA-CASE-XNP-04231] c14 N73-32325
- ION CONCENTRATION**
Deposition of alloy films --- on irregularly shaped metal object
[NASA-CASE-LEW-11262-1] c27 N74-13270
- ION CURRENTS**
System for monitoring presence of neutrals in streams of ions - ion engine control
[NASA-CASE-XNP-02592] c24 N71-20518
- ION CYCLOTRON RADIATION**
Ion and electron detector for use in an ICR spectrometer
[NASA-CASE-NPO-13479-1] c35 N77-10492
- ION DENSITY (CONCENTRATION)**
Method and apparatus for measurement of trap density and energy distribution in dielectric films
[NASA-CASE-NPO-13443-1] c76 N76-20994
- ION ENGINES**
Improved cathode containing barium carbonate block and heated tungsten screen for electron bombardment ion thruster
[NASA-CASE-XLE-07087] c06 N69-39889
High-vacuum condenser tank for testing ion rocket engines
[NASA-CASE-XLE-00168] c11 N70-33278
Encapsulated heater forming hollow body for cathode used in ion thruster
[NASA-CASE-LEW-10814-1] c28 N70-35422
Electrostatic ion engines using high velocity electrons to ionize propellant
[NASA-CASE-XLE-00376] c28 N70-37245
Metal ion rocket engine design
[NASA-CASE-XLE-00342] c28 N70-37980
Dynamometer measuring microforce thrust produced by ion engine
[NASA-CASE-XLE-00702] c14 N70-40203
Increasing available power per unit area in ion rocket engine by increasing beam density
[NASA-CASE-XLE-00519] c28 N70-41576
Accel and focus electrode design for ion engine with improved efficiency
[NASA-CASE-XNP-02839] c28 N70-41922
Ion engine with magnetic circuit for optimal discharge
[NASA-CASE-XLE-01124] c28 N71-14043
Electron bombardment ion rocket engine with improved propellant introduction system
[NASA-CASE-XLE-02066] c28 N71-15661
System for monitoring presence of neutrals in streams of ions - ion engine control
[NASA-CASE-XNP-02592] c24 N71-20518
Construction and method of arranging plurality of ion engines to form cluster thereby increasing efficiency and control by decreasing heat radiated to space
[NASA-CASE-XNP-02923] c28 N71-23081
Electronic cathodes for use in electron bombardment ion thrusters
[NASA-CASE-XLE-04501] c09 N71-23190
Permanently magnetized ion engine casing construction for use in spacecraft propulsion systems
[NASA-CASE-XNP-06942] c28 N71-23293
Development and characteristics of ion thruster accelerator with single glass coated grid to provide increased ion extraction capability and larger diameter accelerator system
[NASA-CASE-LEW-10106-1] c28 N71-26642
Internal labyrinth and shield structure to improve electrical isolation of propellant feed source from ion thruster
[NASA-CASE-LEW-10210-1] c28 N71-26781
Low mass ionizing device for use in electric thrust spacecraft engines

- [NASA-CASE-XNP-01954] c28 N71-28850
Development of system for delivering vaporized mercury to electron bombardment ion engine
[NASA-CASE-NPO-10737] c28 N72-11709
Characteristics of ion rocket engine with combination keeper electrode and electron baffle
[NASA-CASE-NPO-11880] c28 N73-24783
Single grid accelerator system for electron bombardment type ion thruster
[NASA-CASE-XLE-10453-2] c28 N73-27699
Method of making dished ion thruster grids
[NASA-CASE-LEW-11694-1] c20 N75-18310
Method of constructing dished ion thruster grids to provide hole array spacing compensation
[NASA-CASE-LEW-11876-1] c20 N76-21276
- ION EXCHANGE MEMBRANE ELECTROLYTES**
Inorganic ion exchange membrane electrolytes for fuel cell use
[NASA-CASE-XNP-04264] c03 N69-21337
Development and characteristics of ion-exchange membrane and electrode assembly for fuel cells or electrolysis cells
[NASA-CASE-XMS-02063] c03 N71-29044
Formulated plastic separators for soluble electrode cells
[NASA-CASE-LEW-12358-2] c25 N78-25149
Formulated plastic separators for soluble electrode cells --- rubber-ion transport membranes
[NASA-CASE-LEW-12358-1] c44 N79-17313
Insoluble polyelectrolyte and ion-exchange hollow fiber impregnated therewith
[NASA-CASE-NPO-13530-1] c25 N81-17187
- ION EXCHANGE RESINS**
Inorganic-organic separators for alkaline batteries
[NASA-CASE-LEW-12649-1] c44 N78-25530
Dialysis system --- using ion exchange resin membranes permeable to urea molecules
[NASA-CASE-NPO-14101-1] c52 N80-14687
Membrane consisting of polyquaternary amine ion exchange polymer network interpenetrating the chains of thermoplastic matrix polymer
[NASA-CASE-NPO-14001-1] c27 N81-14076
- ION EXCHANGING**
Membrane consisting of polyquaternary amine ion exchange polymer network interpenetrating the chains of thermoplastic matrix polymer
[NASA-CASE-NPO-14001-1] c27 N81-14076
Ion-exchange hollow fibers
[NASA-CASE-NPO-13309-1] c25 N81-19244
- ION EXTRACTION**
Apparatus for extraction and separation of a preferentially photo-dissociated molecular isotope into positive and negative ions by means of an electric field
[NASA-CASE-LEW-12465-1] c25 N78-25148
- ION IMPLANTATION**
Method of making V-MOS field effect transistors utilizing a two-step anisotropic etching and ion implantation
[NASA-CASE-GSC-12515-1] c33 N81-26360
- ION IRRADIATION**
Modification of the electrical and optical properties of polymers --- ion irradiation to create texture
[NASA-CASE-LEW-13027-1] c27 N80-24437
- ION PLATING**
Catalyst surfaces for the chromous/chromic redox couple
[NASA-CASE-LEW-13148-2] c44 N81-29524
- ION PROBES**
Ion microprobe mass spectrometer with cooled electrode target for analyzing traces of fluids
[NASA-CASE-BEC-10014] c14 N71-28663
- ION PROPULSION**
Variable thrust ion engine using thermal decomposition of solid cesium compound to produce propulsive vapor
[NASA-CASE-XNP-00923] c28 N70-36802
Electrostatic ion engines using high velocity electrons to ionize propellant
[NASA-CASE-XLE-00376] c28 N70-37245
Metal ion rocket engine design
[NASA-CASE-XLE-00342] c28 N70-37580
Method for producing porous tungsten plates for ionizing cesium compounds for propulsion of ion engines
[NASA-CASE-XLE-00455] c28 N70-38197
- Accel and focus electrode design for ion engine with improved efficiency
[NASA-CASE-XNP-02839] c28 N70-41922
Electric rocket engine with electron bombardment ionization chamber
[NASA-CASE-XNP-04124] c28 N71-21822
Ion beam deflector system for electronic thrust vector control for ion propulsion yaw, pitch, and roll forces
[NASA-CASE-LEW-10689-1] c28 N71-26173
Development and characteristics of ion thruster accelerator with single glass coated grid to provide increased ion extraction capability and larger diameter accelerator system
[NASA-CASE-LEW-10106-1] c28 N71-26642
Development of system for delivering vaporized mercury to electron bombardment ion engine
[NASA-CASE-NPO-10737] c28 N72-11709
Radial magnetic field for ion thruster
[NASA-CASE-LEW-10770-1] c28 N72-22770
Automatic shunting of ion thruster magnetic field when thruster is not operating
[NASA-CASE-LEW-10835-1] c28 N72-22771
Method of making dished ion thruster grids
[NASA-CASE-LEW-11694-1] c20 N75-18310
Apparatus for forming dished ion thruster grids
[NASA-CASE-LEW-11694-2] c37 N76-14461
Anode for ion thruster
[NASA-CASE-LEW-12048-1] c20 N77-20162
Closed Loop solar array-ion thruster system with power control circuitry
[NASA-CASE-LEW-12780-1] c20 N79-20179
- ION PUMPS**
Mass spectrometer with magnetic pole pieces providing the magnetic fields for both the magnetic sector and an ion-type vacuum pump
[NASA-CASE-NPO-13663-1] c35 N77-14406
- ION SOURCES**
Apertured electrode focusing system for ion sources with nonuniform plasma density
[NASA-CASE-XNP-03332] c09 N71-10618
Multilayer porous refractory metal ionizer design with thick, porous, large-grain substrates and thin, porous micron-grain substrates
[NASA-CASE-XNP-04338] c17 N71-23046
Development and characteristics of ion thruster accelerator with single glass coated grid to provide increased ion extraction capability and larger diameter accelerator system
[NASA-CASE-LEW-10106-1] c28 N71-26642
Low mass ionizing device for use in electric thrust spacecraft engines
[NASA-CASE-XNP-01954] c28 N71-28850
Development and characteristics of apparatus for ionization analysis
[NASA-CASE-AEC-10017-1] c14 N72-29464
Sputtering holes with ion beamlets
[NASA-CASE-LEW-11646-1] c20 N74-31269
Multitarget sequential sputtering apparatus
[NASA-CASE-NPO-13345-1] c37 N75-19684
Miniature cyclotron resonance ion source using small permanent magnet
[NASA-CASE-NPO-14324-1] c72 N80-27163
Hydrogen hollow cathode ion source
[NASA-CASE-LEW-12940-1] c72 N80-33186
- ION TRAPS (INSTRUMENTATION)**
Method and apparatus for measurement of trap density and energy distribution in dielectric films
[NASA-CASE-NPO-13443-1] c76 N76-20994
- IONIC MOBILITY**
An improved solid electrolyte cell
[NASA-CASE-NPO-15269-1] c33 N81-16385
- IONIZATION CHAMBERS**
Automatic baseline stabilization for ionization detector used in gas chromatograph
[NASA-CASE-XNP-03128] c10 N70-41991
Electric rocket engine with electron bombardment ionization chamber
[NASA-CASE-XNP-04124] c28 N71-21822
Multichannel photoionization chamber for measuring absorption, photoionization yield, and coefficients of gases
[NASA-CASE-BEC-10044-1] c14 N71-27090
Development and characteristics of apparatus for ionization analysis
[NASA-CASE-AEC-10017-1] c14 N72-29464

IONIZATION GAGES

Ionization vacuum gage
[NASA-CASE-XNP-00646] c14 N70-35666

Ionization control system design for monitoring
separately located ion gage pressures on
vacuum chambers

[NASA-CASE-XLB-00787] c14 N71-21090

Development and characteristics of apparatus for
ionization analysis

[NASA-CASE-ABC-10017-1] c14 N72-29464

Ionization gage for measuring ultrahigh vacuum
levels

[NASA-CASE-XLA-05087] c14 N73-30391

IONIZATION POTENTIALS

Electrodes having array of small surfaces for
field ionization

[NASA-CASE-BRC-10013] c09 N71-26678

IONIZED GASES

Plasma probes having guard ring and primary
sensor at same potential to prevent stray wall
current collection in ionized gases

[NASA-CASE-XLB-00690] c25 N69-39884

Transient heat transfer gage for measuring total
radiant intensity from far ultraviolet and
ionized high temperature gases

[NASA-CASE-XNP-09802] c33 N71-15641

Apparatus for extraction and separation of a
preferentially photo-dissociated molecular
isotope into positive and negative ions by
means of an electric field

[NASA-CASE-LEW-12465-1] c25 N78-25148

IONIZERS

Description of electrical equipment and system
for purification of waste water by producing
silver ions for bacterial control

[NASA-CASE-MSC-10960-1] c03 N71-24718

Method of making dish ion thruster grids

[NASA-CASE-LEW-11694-1] c20 N75-18310

IONIZING RADIATION

High voltage cable for use in high intensity
ionizing radiation fields

[NASA-CASE-XNP-00738] c09 N70-38201

Reinforced polyquinoxaline gasket and method of
preparing the same --- resistant to ionizing
radiation and liquid hydrogen temperatures

[NASA-CASE-MFS-21364-1] c37 N74-18126

IONOSPHERE

Lightweight, rugged, inexpensive satellite
battery for producing electrical power from
ionosphere using electrodes with different
contact potentials

[NASA-CASE-XGS-01593] c03 N70-35408

IONS

Micrometeoroid analyzer using arrays of
interconnected capacitors and ion detector

[NASA-CASE-ABC-10443-1] c14 N73-20477

IRIDIUM

Thermocouples of molybdenum and iridium alloys
for more stable vacuum-high temperature
performance

[NASA-CASE-LEW-12174-2] c35 N79-14346

IRISES (MECHANICAL APERTURES)

Waveguide, thin film window and microwave irises

[NASA-CASE-LAR-10513-1] c07 N72-25170

Development of thin film microwave iris
installed in microwave waveguide transverse to
flow of energy in waveguide

[NASA-CASE-LAR-10511-1] c09 N72-29172

IRON ALLOYS

Tantalum modified ferritic iron base alloys

[NASA-CASE-LEW-12095-1] c26 N78-18182

Process for making a high toughness-high
strength iron alloy

[NASA-CASE-LEW-12542-2] c26 N79-22271

High toughness-high strength iron alloy

[NASA-CASE-LEW-12542-3] c26 N80-32484

IRON COMPOUNDS

Coal desulfurization --- using iron pentacarbonyl

[NASA-CASE-NPO-14272-1] c25 N81-33246

IRRADIATION

Solar sensor with coarse and fine sensing
elements for matching preirradiated cells on
degradation rates

[NASA-CASE-XLA-01584] c14 N71-23269

Apparatus for obtaining isotropic irradiation on
film emulsion from parallel radiation source

[NASA-CASE-MFS-20095] c24 N72-11595

Production of pure metals

[NASA-CASE-LEW-10906-1] c25 N74-30502

Method for analyzing radiation sensitivity of
integrated circuits

[NASA-CASE-NPO-14350-1] c33 N80-14332

Vitro-violet process for producing flame
resistant polyamides and products produced
thereby --- protective clothing for high
oxygen environments

[NASA-CASE-MSC-16074-1] c27 N80-26446

IRRIGATION

Solar-powered pump

[NASA-CASE-NPO-13567-1] c44 N76-29701

ISOLATORS

Internal labyrinth and shield structure to
improve electrical isolation of propellant
feed source from ion thruster

[NASA-CASE-LEW-10210-1] c28 N71-26781

Positive isolation disconnect

[NASA-CASE-MSC-16043-1] c37 N79-11402

Resonant isolator for maser amplifier

[NASA-CASE-NPO-15201-1] c36 N81-24426

ISOPROPYL ALCOHOL

Preparation of fluorinated polyethers from
2-hydro-perhaloisopropyl alcohols

[NASA-CASE-MFS-11492] c06 N73-30102

ISOTHERMAL LAYERS

Double-wall isothermal cylinder containing heat
transfer fluid thermal reservoir as spacecraft
insulation cover

[NASA-CASE-MFS-20355] c33 N71-25353

ISOTHERMAL PROCESSES

Opto-mechanical subsystem with temperature
compensation through isothermal design

[NASA-CASE-GSC-12059-1] c35 N77-27366

ISOTOPE SEPARATION

Isotope separation using metallic vapor lasers

[NASA-CASE-NPO-13550-1] c36 N77-26477

J

JET AIRCRAFT

Deflector for preventing objects from entering
nacelle inlets of jet aircraft

[NASA-CASE-XLB-00388] c28 N70-34788

JET AIRCRAFT NOISE

Upper surface, external flow, jet-augmented flap
configuration for high wing jet aircraft for
noise reduction

[NASA-CASE-XLA-00087] c02 N70-33332

Noise suppressor --- for turbofan engine by
incorporating annular acoustically porous
elements in exhaust and inlet ducts

[NASA-CASE-LAR-11141-1] c07 N74-32418

Abating exhaust noises in jet engines

[NASA-CASE-ARC-10712-1] c07 N74-33218

Instrumentation for measurement of aircraft
noise and sonic boom

[NASA-CASE-LAR-11173-1] c35 N75-19614

Cascade plug nozzle --- for jet noise reduction

[NASA-CASE-LAR-11674-1] c07 N76-18117

JET AMPLIFIERS

Fluid jet amplifier with fluid from jet nozzle
deflected by inlet pressure

[NASA-CASE-XLB-03512] c12 N69-21466

Fluid control jet amplifiers

[NASA-CASE-XLB-09341] c12 N71-28741

JET BLAST EFFECTS

Separation mechanism for use between stages of
multistage rocket vehicles

[NASA-CASE-XLA-00188] c15 N71-22874

JET CONTROL

Attitude control device for space vehicles

[NASA-CASE-XNP-00294] c21 N70-36938

JET ENGINES

Absorptive, nonreflecting barrier mounted
between closely spaced jet engines on
supersonic aircraft, for preventing shock wave
interference

[NASA-CASE-XLA-02865] c28 N71-15563

Development of thrust dynamometer for measuring
performance of jet and rocket engines

[NASA-CASE-XLB-05260] c14 N71-20429

Afterburner-equipped jet engine nacelle with
slotted configuration afterbody

[NASA-CASE-XLA-10450] c28 N71-21493

Process for welding compressor and turbine
blades to rotors and discs of jet engines

[NASA-CASE-LEW-10533-1] c15 N73-28515

Variably positioned guide vanes for aerodynamic
choking

- [NASA-CASE-LAR-10642-1] c07 N74-31270
Cascade plug nozzle --- for jet noise reduction
[NASA-CASE-LAR-11674-1] c07 N76-18117
The engine air intake system
[NASA-CASE-ARC-10761-1] c07 N77-18154
Stator rotor tools
[NASA-CASE-MSC-16000-1] c37 N78-24544
Electrical servo actuator bracket --- fuel
control valves on jet engines
[NASA-CASE-PHC-11044-1] c37 N81-33483
- JET EXHAUST**
Jet exhaust noise suppressor
[NASA-CASE-LEW-11286-1] c07 N74-27490
Gas turbine engine with recirculating bleed
[NASA-CASE-LEW-12452-1] c07 N78-25089
Reduction of nitric oxide emissions from a
combustor
[NASA-CASE-ARC-10814-2] c07 N80-26298
- JET FLAPS**
Upper surface, external flow, jet-augmented flap
configuration for high wing jet aircraft for
noise reduction
[NASA-CASE-XLA-00087] c02 N70-33332
- JET FLOW**
Two-phase flow system with discrete, impinging
two-phase jets
[NASA-CASE-NPO-11556] c12 N72-25292
- JET MIXING FLOW**
Fuel injection system for maximum combustion
efficiency of rocket engines
[NASA-CASE-XLE-00111] c28 N70-38199
- JET NOZZLES**
Fluid jet amplifier with fluid from jet nozzle
deflected by inlet pressure
[NASA-CASE-XLE-03512] c12 N69-21466
Thrust and attitude control apparatus using jet
nozzle in movable canard surface or fin
configuration
[NASA-CASE-XLE-03583] c31 N71-17629
Heater-mixer for stored fluids
[NASA-CASE-ARC-10442-1] c35 N74-15093
- JET PROPULSION**
Two dimensional wedge/translating shroud nozzle
[NASA-CASE-LAR-11919-1] c07 N78-27121
- JET STREAMS (METEOROLOGY)**
CAT altitude avoidance system
[NASA-CASE-NPO-15351-1] c47 N81-16677
- JET THRUST**
System for aerodynamic control of rocket
vehicles by secondary injection of fluid into
nozzle exhaust stream
[NASA-CASE-XLA-01163] c21 N71-15582
Drive mechanism for operating reactance attitude
control system for aerospace bodies
[NASA-CASE-XMF-01598] c21 N71-15583
Method and apparatus for rapid thrust increases
in a turbofan engine
[NASA-CASE-LEW-12971-1] c07 N80-18039
- JETTISON SYSTEMS**
Describing assembly for opening stabilizing and
decelerating flaps of flight capsules used in
space research
[NASA-CASE-XMF-03169] c31 N71-15675
System for deploying and ejecting releasable
clamshell fairing sections from spinning
sounding rockets
[NASA-CASE-GSC-10590-1] c31 N73-14853
Explosively activated egress area
[NASA-CASE-LAR-12624-1] c03 N81-29107
- JIGS**
Apparatus for positioning modular components on
a vertical or overhead surface
[NASA-CASE-LAR-11465-1] c37 N76-21554
Solar cell module assembly jig
[NASA-CASE-XGS-00829-1] c44 N79-19447
- JOINING**
Integrated gas turbine engine-nacelle
[NASA-CASE-LEW-12389-3] c07 N79-14096
- JOINTS (ANATOMY)**
Space suit with pressure-volume compensator system
[NASA-CASE-XLA-05332] c05 N71-11194
Equipotential space suits utilizing mechanical
aids to minimize astronaut energy at bending
joints
[NASA-CASE-LAR-10007-1] c05 N71-11195
Cold restraint system for pressure suit joints
[NASA-CASE-XMS-09635] c05 N71-24623
Orthotic arm joint --- for use in mechanical arms
[NASA-CASE-MPS-21611-1] c54 N75-12616
- Rotational joint assembly for the prosthetic leg
[NASA-CASE-KSC-11004-1] c54 N77-30749
Spacesuit mobility knee joints
[NASA-CASE-ARC-11058-2] c54 N79-24651
- JOINTS (JUNCTIONS)**
Hollow spherical electrode for shielding
dielectric junction between high voltage
conductor and insulator
[NASA-CASE-XLE-03778] c09 N69-21542
Elastic universal joint for rocket motor mounting
[NASA-CASE-XNP-00416] c15 N70-36947
Portable device for aligning surfaces of two
adjacent wall or sheet sections for joining at
point of junction
[NASA-CASE-XNP-01452] c15 N70-41371
Design and development of flexible joint for
pressure suits
[NASA-CASE-XMS-09636] c05 N71-12344
Elbow forming in jacketed pipes while
maintaining separation between core shape and
jacket pipes
[NASA-CASE-XNP-10475] c15 N71-24679
Method and apparatus for precision sizing and
joining of large diameter tubes by bulging or
constricting overlapping ends
[NASA-CASE-XNP-05114-2] c15 N71-26148
Universal joints for connecting two displaced
shafts or members
[NASA-CASE-NPO-10646] c15 N71-28467
Flexible bellows joint shielding sleeve for
propellant transfer pipelines
[NASA-CASE-XNP-01855] c15 N71-28937
Mechanism for restraining universal joints to
prevent separation while allowing bending,
angulation, and lateral offset in any position
about axis
[NASA-CASE-XNP-02278] c15 N71-28951
Diffusion welding in air --- solid state welding
of butt joint by fusion welding, surface
cleaning, and heating
[NASA-CASE-LEW-11387-1] c37 N74-18128
Bonded joint and method --- for reducing peak
shear stress in adhesive bonds
[NASA-CASE-LAR-10900-1] c37 N74-23064
Flexible joint for pressurizable garment
[NASA-CASE-MSC-11072] c54 N74-32546
Method of making an explosively welded scarf joint
[NASA-CASE-LAR-11211-1] c37 N75-12326
Latching device
[NASA-CASE-MPS-21606-1] c37 N75-19685
Method of determining bond quality of power
transistors attached to substrates --- I ray
inspection of junction microstructure
[NASA-CASE-MPS-21931-1] c37 N75-26372
Externally supported internally stabilized
flexible duct joint
[NASA-CASE-MPS-19194-1] c37 N76-14460
Wrist joint assembly
[NASA-CASE-MPS-23311-1] c54 N78-17676
Spacesuit mobility joints
[NASA-CASE-ARC-11058-1] c54 N78-31735
Mechanical end joint system for structural
column elements
[NASA-CASE-LAR-12482-1] c37 N80-22704
Pressure suit joint analyzer
[NASA-CASE-ARC-11314-1] c54 N80-30043
Thermal barrier pressure seal --- shielding
junctions between spacecraft control surfaces
and structures
[NASA-CASE-MSC-18134-1] c37 N81-15363
Electrical rotary joint apparatus for large
space structures
[NASA-CASE-MPS-23981-1] c33 N81-19394
- JOSEPHSON JUNCTIONS**
Doped Josephson tunneling junction for use in a
sensitive IR detector
[NASA-CASE-NPO-13348-1] c33 N75-31332
Microwave integrated circuit for Josephson
voltage standards
[NASA-CASE-MPS-23845-1] c33 N81-17348
- JOULE-THOMSON EFFECT**
Gas balancing, cryogenic refrigeration apparatus
with Joule-Thomson valve assembly
[NASA-CASE-NFO-10309] c15 N69-23190
A cycling Joule Thomson refrigerator
[NASA-CASE-NPO-15251-1] c31 N81-19344
- JOURNAL BEARINGS**
Slit regulated gas journal bearing
[NASA-CASE-XNP-00476] c15 N70-38620

Journal air bearing with cylindrical cup
designed to ride on shaft
[NASA-CASE-MFS-20423] c15 N72-11388

Journal bearings --- for lubricant films
[NASA-CASE-LEW-11076-1] c37 N74-21061

Journal Bearings
[NASA-CASE-LEW-11076-2] c37 N74-32921

Lubricated journal bearing
[NASA-CASE-LEW-11076-3] c37 N75-30562

Fluid journal bearings
[NASA-CASE-LEW-11076-4] c37 N76-15461

JUNCTION DIODES

Phototransistor with base collector junction
diode for integration into photo sensor arrays
[NASA-CASE-MFS-20407] c09 N73-19235

Diode-quad bridge circuit means
[NASA-CASE-ARC-10364-2] c33 N75-25041

Charge storage diode modulators and demodulators
[NASA-CASE-NPO-10189-1] c33 N77-21314

JUNCTION TRANSISTORS

Apparatus for ballasting high frequency
transistors
[NASA-CASE-XGS-05003] c09 N69-24318

Miniature piezjunction semiconductor transducer
with in situ stress coupling
[NASA-CASE-ERC-10087-2] c14 N72-31446

Method of determining bond quality of power
transistors attached to substrates --- X ray
inspection of junction microstructure
[NASA-CASE-MFS-21931-1] c37 N75-26372

K

KEYING

High-speed multiplexing of keyboard data inputs
[NASA-CASE-NPO-14554-1] c60 N81-27814

KIDNEY DISEASES

Aldehyde-containing urea-absorbing polysaccharides
[NASA-CASE-NPO-13620-1] c27 N77-30236

KINETIC ENERGY

Non-reusable kinetic energy absorber for
application in soft landing of space vehicles
[NASA-CASE-XLE-00810] c15 N70-34861

Method and turbine for extracting kinetic energy
from a stream of two-phase fluid
[NASA-CASE-NPO-14130-1] c34 N79-20335

KINETIC FRICTION

Kinetic and static friction force measurement
between magnetic tape and magnetic head surfaces
[NASA-CASE-INP-08680] c14 N71-22595

KINETICS

Micrometeoroid analyzer using arrays of
interconnected capacitors and ion detector
[NASA-CASE-ARC-10443-1] c14 N73-20477

KRAFT PROCESS (WOODPULP)

Process for purification of waste water produced
by a Kraft process pulp and paper mill
[NASA-CASE-NPO-13847-2] c85 N79-17747

L

LABORATORY EQUIPMENT

Design of mechanical device for stirring several
test tubes simultaneously
[NASA-CASE-XAC-06956] c15 N71-21177

Gas purged dry box glove reducing permeation of
air or moisture into dry box or isolator by
diffusion through glove
[NASA-CASE-XLE-02531] c05 N71-23080

Apparatus and process for volumetrically
dispensing reagent quantities of volatile
chemicals for small batch reactions
[NASA-CASE-NPO-10070] c15 N71-27372

Development of variable angle device for
positioning test tubes to permit optimum
drying of culture medium
[NASA-CASE-LAR-10507-1] c11 N72-25284

Development of method for controlling vapor
content of gas
[NASA-CASE-NPO-10633] c03 N72-28025

Apparatus for mixing two or more liquids under
zero gravity conditions
[NASA-CASE-LAR-10195-1] c15 N73-19458

Automatic real-time pair-feeding system for
animals
[NASA-CASE-ARC-10302-1] c51 N74-15778

Automated single-slide staining device
[NASA-CASE-LAR-11649-1] c51 N77-27677

Machine for use in monitoring fatigue life for a
plurality of elastomeric specimens
[NASA-CASE-NPO-13731-1] c39 N78-10493

The 2 deg/90 deg laboratory scattering photometer
--- particulate refractivity in hydrosols
[NASA-CASE-GSC-12088-1] c74 N78-13874

Automatic multiple-sample applicator and
electrophoresis apparatus
[NASA-CASE-ARC-10991-1] c25 N78-14104

Microelectrophoretic apparatus and process
[NASA-CASE-ARC-11121-1] c25 N79-14169

Electrophoresis device
[NASA-CASE-MFS-25426-1] c25 N81-29179

LACQUERS

Method for applying photographic resists to
otherwise incompatible substrates
[NASA-CASE-MSC-18107-1] c27 N81-25209

LAMINAR FLOW

Laminar flow of liquid coolants in rocket engines
[NASA-CASE-NPO-10122] c12 N71-17631

Detection of the transitional layer between
laminar and turbulent flow areas on a wing
surface --- using an accelerometer to measure
pressure levels during wind tunnel tests
[NASA-CASE-LAR-12261-1] c02 N80-20224

LAMINATES

Multilayer porous refractory metal ionizer
design with thick, porous, large-grain
substrates and thin, porous micron-grain
substrates
[NASA-CASE-INP-04338] c17 N71-23046

Development and characteristics of polyimide
impregnated laminates with fiberglass cloth
backing for application as printed circuit
boards
[NASA-CASE-MFS-20408] c18 N73-12604

Reinforced polyquinoxaline gasket and method of
preparing the same --- resistant to ionizing
radiation and liquid hydrogen temperatures
[NASA-CASE-MFS-21364-1] c37 N74-18126

Method of laminating structural members
[NASA-CASE-XLA-11028-1] c24 N74-27035

Bonding method in the manufacture of continuous
regression rate sensor devices
[NASA-CASE-LAR-10337-1] c24 N75-30260

Transparent fire resistant polymeric structures
[NASA-CASE-ARC-10813-1] c27 N76-16230

Leading edge protection for composite blades
[NASA-CASE-LEW-12550-1] c24 N77-19170

Hybrid composite laminate structures
[NASA-CASE-LEW-12118-1] c24 N77-27188

Honeycomb-laminate composite structure
[NASA-CASE-ARC-10913-1] c24 N78-15180

Composite lamination method
[NASA-CASE-LAR-12019-1] c24 N78-17150

Lightweight electrically-powered flexible
thermal laminate --- made of metal and
nonconductive yarns
[NASA-CASE-MSC-12662-1] c33 N79-12331

Method for making patterns for resin matrix
composites
[NASA-CASE-ARC-11246-1] c24 N80-22410

Process for preparing high temperature polyimide
film laminates
[NASA-CASE-LAR-12742-1] c24 N81-12174

Method for alleviating thermal stress damage in
laminates --- metal matrix composites
[NASA-CASE-LEW-12493-1] c24 N81-17170

Method for alleviating thermal stress damage in
laminates
[NASA-CASE-LEW-12493-2] c24 N81-26179

Method of making a partial interlaminar
separation composite system
[NASA-CASE-LAR-12065-2] c24 N81-33235

LANDFORMS

Method for observing the features characterizing
the surface of a land mass
[NASA-CASE-FRC-11013-1] c43 N81-17499

LANDING AIDS

Electro-optical attitude sensing device for
landing approach of flight vehicle
[NASA-CASE-INS-01994-1] c14 N72-17326

Magnetic method for detection of aircraft
position relative to runway
[NASA-CASE-ARC-10179-1] c21 N72-22619

Full color hybrid display for aircraft simulators
--- landing aids
[NASA-CASE-ARC-10903-1] c09 N78-18083

LANDING GEAR

Pivotal shock absorbing assembly for use as load distributing portion in landing gear systems of space vehicles
[NASA-CASE-XMF-03856] c31 N70-34159

Nose gear steering system for vehicles with main skids to provide directional stability after loss of aerodynamic control
[NASA-CASE-XLA-01804] c02 N70-34160

Landing pad assembly for aerospace vehicles
[NASA-CASE-XMF-02853] c31 N70-36654

Aircraft wheel spray drag alleviator for dual tandem landing gear
[NASA-CASE-XLA-01583] c02 N70-36825

Spacecraft shock absorbing system for soft landings
[NASA-CASE-XMF-02108] c31 N70-36845

Shock absorber for landing gear of lunar or planetary landing modules
[NASA-CASE-XMF-01045] c15 N70-40354

Vertically descending flight vehicle landing gear for rough terrain
[NASA-CASE-XMF-01174] c02 N70-41589

Tire/wheel concept
[NASA-CASE-LAR-11695-2] c37 N81-24443

LANDING MODULES
Shock absorber for landing gear of lunar or planetary landing modules
[NASA-CASE-XMF-01045] c15 N70-40354

LANDING SIMULATION
Lunar and planetary gravity simulator to test vehicular response to landing
[NASA-CASE-XLA-00493] c11 N70-34786

LANTHANUM COMPOUNDS
Cesium thermionic converters having improved electrodes
[NASA-CASE-LEW-12038-3] c44 N78-25555

LARGE SCALE INTEGRATION
A general logic structure for custom LSI circuits
[NASA-CASE-NPO-14410-1] c33 N79-25314

Tactile sensing system --- manipulator controllers
[NASA-CASE-NPO-15094-1] c33 N81-16386

LARGE SPACE STRUCTURES
Electrical rotary joint apparatus for large space structures
[NASA-CASE-MFS-23981-1] c33 N81-19394

Structural members, method and apparatus
[NASA-CASE-TELESC-16217-1] c31 N81-27323

LARGE SPACE TELESCOPE
System for the measurement of ultra-low stray light levels --- determining the adequacy of large space telescope systems
[NASA-CASE-MFS-23513-1] c74 N79-11865

LASER ALTIMETERS
Sidelooking laser altimeter for a flight simulator
[NASA-CASE-ARC-11312-1] c36 N81-19439

LASER APPLICATIONS
High power laser apparatus and system
[NASA-CASE-XLE-2529-2] c36 N75-27364

Fiber distributed feedback laser
[NASA-CASE-NPO-13531-1] c36 N76-24553

Wind measurement system
[NASA-CASE-MFS-23362-1] c47 N77-10753

Pseudo-backscatter laser Doppler velocimeter employing antiparallel-reflector in the forward direction
[NASA-CASE-ARC-10970-1] c36 N77-25501

Compact pulsed laser having improved heat conductance
[NASA-CASE-NPO-13147-1] c36 N77-25502

Laser extensometer
[NASA-CASE-MFS-19259-1] c36 N78-14380

Apparatus for extraction and separation of a preferentially photo-dissociated molecular isotope into positive and negative ions by means of an electric field
[NASA-CASE-LEW-12465-1] c25 N78-25148

Volumetric direct nuclear pumped laser
[NASA-CASE-LAR-12183-1] c36 N79-18307

Dual laser optical system and method for studying fluid flow
[NASA-CASE-MFS-25315-1] c36 N81-19440

LASER CAVITIES
Laser apparatus
[NASA-CASE-GSC-12237-1] c36 N80-14384

LASER DOPPLER VELOCIMETERS
Dual wavelength scanning Doppler velocimeter --- without perturbation of flow fields
[NASA-CASE-ARC-10637-1] c35 N75-16783

Combined dual scatter, local oscillator laser Doppler velocimeter
[NASA-CASE-ARC-10642-1] c36 N76-14447

Focused laser Doppler velocimeter
[NASA-CASE-MFS-23178-1] c35 N77-10493

Pseudo-backscatter laser Doppler velocimeter employing antiparallel-reflector in the forward direction
[NASA-CASE-ARC-10970-1] c36 N77-25501

Optical scanner --- laser doppler velocimeters
[NASA-CASE-LAR-11711-1] c74 N78-17866

Versatile LDV burst simulator
[NASA-CASE-LAR-11859-1] c35 N79-14349

Scanning afocal laser velocimeter projection lens system
[NASA-CASE-LAR-12328-1] c74 N80-12866

Laser Doppler velocity simulator --- to induce frequency shift
[NASA-CASE-LAR-12176-1] c36 N80-16321

Rhomboid prism pair for rotating the plane of parallel light beams --- laser velocimeters
[NASA-CASE-ARC-11311-1] c74 N81-16882

Direction sensitive laser velocimeter --- determining the direction of particles using a helium-neon laser
[NASA-CASE-LAR-12177-1] c36 N81-24422

LASER DRILLING
In-situ laser retorting of oil shale
[NASA-CASE-LEW-12217-1] c43 N78-14452

LASER FUSION
Laser surface fusion of plasma sprayed ceramic turbine seals
[NASA-CASE-LEW-13269-1] c27 N81-22190

LASER GUIDANCE
Scanning afocal laser velocimeter projection lens system
[NASA-CASE-LAR-12328-1] c74 N80-12866

LASER GYROSCOPES
Optical gyroscope system
[NASA-CASE-NPO-14258-1] c35 N81-33448

LASER HEATING
Electric power generation system directory from laser power
[NASA-CASE-NPO-13308-1] c36 N75-30524

Method and apparatus for shaping and enhancing acoustical levitation forces
[NASA-CASE-MFS-25050-1] c71 N81-15767

LASER INTERFEROMETRY
Dual-beam skin friction interferometer --- portable equipment
[NASA-CASE-ARC-11354-1] c36 N81-29415

LASER MATERIALS
Laser head for simultaneous optical pumping of several dye lasers --- with single flash lamp
[NASA-CASE-LAR-11341-1] c36 N75-19655

LASER MODE LOCKING
Laser system with an antiresonant optical ring
[NASA-CASE-BQN-10844-1] c36 N75-19653

Dually mode locked Nd:YAG laser
[NASA-CASE-GSC-11746-1] c36 N75-19654

Length controlled stabilized mode-lock Nd:YAG laser
[NASA-CASE-GSC-11571-1] c36 N77-25499

LASER MODES
Xenon flashlamp driver system for optical laser pumping
[NASA-CASE-ERC-10283] c16 N72-25485

Acoustically controlled distributed feedback laser
[NASA-CASE-NPO-13175-1] c36 N75-31427

LASER OUTPUTS
Method and apparatus using temperature control for wavelength tuning of liquid lasers
[NASA-CASE-ERC-10187] c16 N69-31343

Describing laser Doppler velocimeter for measuring mean velocity and turbulence of fluid flow
[NASA-CASE-MFS-20386] c21 N71-19212

Development of apparatus for amplitude modulation of diode laser by periodic discharge of direct current power supply
[NASA-CASE-IMS-04269] c16 N71-22895

Doppler shifted laser beam as fluid velocity sensor
[NASA-CASE-XAC-10770-1] c16 N71-24828

Calibrator for measuring and modulating or demodulating laser outputs
[NASA-CASE-XLA-03410] c16 N71-25914

Method and apparatus for optically modulating light or microwave beam

[NASA-CASE-GSC-10216-1] c23 N71-26722
 Laser machining device with dielectric functioning as beam waveguide for mechanical and medical applications
 [NASA-CASE-HQN-10541-2] c15 N71-27135
 Optical communication system with gas filled waveguide for laser beam transmission
 [NASA-CASE-HQN-10541-4] c16 N71-27183
 Design and development of multichannel laser remote control system using modulated helium-neon laser as transmitter and light collector as receiving antenna
 [NASA-CASE-LAR-10311-1] c16 N73-16536
 Performance of ac power supply developed for CO2 laser system
 [NASA-CASE-GSC-11222-1] c16 N73-32391
 Thermomagnetic recording and magneto-optic playback system having constant intensity laser beam control
 [NASA-CASE-NPO-11317-2] c36 N74-13205
 Apparatus for scanning the surface of a cylindrical body
 [NASA-CASE-NPO-11861-1] c36 N74-20009
 Optically detonated explosive device
 [NASA-CASE-NPO-11743-1] c28 N74-27425
 Clear air turbulence detector
 [NASA-CASE-MPS-21244-1] c36 N75-15028
 Dually mode locked Nd:YAG laser
 [NASA-CASE-GSC-11746-1] c36 N75-19654
 Laser head for simultaneous optical pumping of several dye lasers --- with single flash lamp
 [NASA-CASE-LAR-11341-1] c36 N75-19655
 Acoustically controlled distributed feedback laser
 [NASA-CASE-NPO-13175-1] c36 N75-31427
 Optical noise suppression device and method --- laser light exposing film
 [NASA-CASE-MSC-12640-1] c74 N76-31598
 Length controlled stabilized mode-lock Nd:YAG laser
 [NASA-CASE-GSC-11571-1] c36 N77-25499
 Apparatus for photon excited catalysis
 [NASA-CASE-NPO-13566-1] c25 N77-32255
 Method and apparatus for Doppler frequency modulation of radiation
 [NASA-CASE-NPO-14524-1] c32 N80-24510
 Collimated beam manifold and method for using the same --- laser beams
 [NASA-CASE-MPS-25312-1] c74 N80-34251
 Method of and apparatus for double-exposure holographic interferometry
 [NASA-CASE-MPS-25405-1] c35 N81-27459
LASER PLASMAS
 Continuous plasma laser --- method and apparatus for producing intense, coherent, monochromatic light from low temperature plasma
 [NASA-CASE-XNP-04167-3] c36 N77-19416
LASER PUMPING
 Large volume multiple path nuclear pumped laser
 [NASA-CASE-LAR-12592-1] c36 N79-26385
 Laser apparatus
 [NASA-CASE-GSC-12237-1] c36 N80-14384
LASER RANGE FINDERS
 Laser measuring system for incremental assemblies --- measuring wire-wrapped frame assemblies in spark chambers
 [NASA-CASE-GSC-12321-1] c36 N80-18380
LASER RANGER/TRACKER
 Laser beam projector for continuous, precise alignment between target, laser generator, and astronomical telescope during tracking
 [NASA-CASE-NPO-11087] c23 N71-29125
LASER SPECTROSCOPY
 Stark effect spectrophone for continuous absorption spectra monitoring --- a technique for gas analysis
 [NASA-CASE-NPO-15102-1] c25 N81-25159
LASER WINDOWS
 Optical scanner --- laser doppler velocimeters
 [NASA-CASE-LAR-11711-1] c74 N78-17866
LASERS
 Laser device for removing material from rotating object for dynamic balancing
 [NASA-CASE-MPS-11279] c16 N71-20400
 Design and development of optical interferometer with laser light source for application to schlieren systems
 [NASA-CASE-XLA-04295] c16 N71-24170
 Self-generating optical frequency waveguide
 [NASA-CASE-HQN-10541-1] c07 N71-26291

Design and characteristics of laser camera system with diffusion filter of small particles with average diameter larger than wavelength of laser light
 [NASA-CASE-NPO-10417] c16 N71-33410
 Optical sensing of supersonic flows by correlating deflections in laser beams through flow
 [NASA-CASE-MPS-20642] c14 N72-21407
 Laser technique for breaking ice in ship path
 [NASA-CASE-LAR-10815-1] c16 N72-22520
 Design of precision vertical alignment system using laser with gravitationally sensitive cavity
 [NASA-CASE-ABC-10444-1] c16 N73-33397
 Tunable cavity resonator with ramp shaped supports
 [NASA-CASE-HQN-10790-1] c36 N74-11313
 Short range laser obstacle detector --- for surface vehicles using laser diode array
 [NASA-CASE-NFO-11856-1] c36 N74-15145
 Long range laser traversing system
 [NASA-CASE-GSC-11262-1] c36 N74-21091
 Deep trap, laser activated image converting system
 [NASA-CASE-NPO-13131-1] c36 N75-19652
 Laser system with an antiresonant optical ring
 [NASA-CASE-HQN-10844-1] c36 N75-19653
 Acoustically controlled distributed feedback laser
 [NASA-CASE-NFO-13175-1] c36 N75-31427
 Method and apparatus for generating coherent radiation in the ultra-violet region and above by use of distributed feedback
 [NASA-CASE-NFC-13346-1] c36 N76-29575
 Polarization compensator for optical communications
 [NASA-CASE-GSC-11782-1] c74 N76-30053
 Gregorian all-reflective optical system
 [NASA-CASE-GSC-12058-1] c74 N77-26942
 Wideband heterodyne receiver for laser communication system
 [NASA-CASE-GSC-12053-1] c32 N77-28346
 Method and apparatus for splitting a beam of energy --- optical communication
 [NASA-CASE-GSC-12083-1] c73 N78-32848
 Large volume multiple path nuclear pumped laser
 [NASA-CASE-LAR-12592-1] c36 N79-26385
 Shock isolator for operating a diode laser on a closed-cycle refrigerator
 [NASA-CASE-GSC-12297-1] c37 N79-28549
 Off-axis coherently pumped laser
 [NASA-CASE-GSC-12592-1] c36 N81-12407
LATCHES
 Bolt-latch mechanism for releasing despin weights from space vehicle
 [NASA-CASE-XLA-00679] c15 N70-38601
 Transparent polycarbonate resin, shell helmet and latch design for high altitude and space flight
 [NASA-CASE-XMS-04935] c05 N71-11190
 Quick disconnect latch and handle combination for mounting articles on walls or supporting bases in spacecraft under zero gravity conditions
 [NASA-CASE-MPS-11132] c15 N71-17649
 Design, development, and characteristics of latching mechanism for operation in limited access areas
 [NASA-CASE-XMS-03745] c15 N71-21076
 Latching mechanism with pivoting catch and self-contained spring ejector
 [NASA-CASE-XLA-03538] c15 N71-24897
 Latch for fastening spacecraft docking rings
 [NASA-CASE-MSC-15474-1] c15 N71-26162
 Latch mechanism
 [NASA-CASE-MSC-12549-1] c37 N74-27903
 Latching device
 [NASA-CASE-MPS-21606-1] c37 N75-19685
 Load regulating latch
 [NASA-CASE-MSC-19535-1] c37 N77-32499
 Helmet latching and attaching ring
 [NASA-CASE-XMS-04670] c54 N78-17678
LATERAL CONTROL
 Three-axis controller operated by hand-wrist motion for yaw, pitch, and roll control
 [NASA-CASE-IAC-01404] c05 N70-41581
 Star sensor system for roll attitude control of spacecraft
 [NASA-CASE-XNP-01307] c21 N70-41856
 Supersonic or hypersonic vehicle control system comprising elevons with hinge line sweep and

- free of adverse aerodynamic cross coupling
[NASA-CASE-XLA-08967] c02 N71-27088
- Vortex-lift roll-control device
[NASA-CASE-LAR-11868-2] c08 N79-14108
- Propulsive lateral control nozzle
[NASA-CASE-LAR-12136-1] c08 N81-33210
- LATERAL STABILITY**
- An annular wing
[NASA-CASE-FRC-11007-2] c02 N79-24959
- LATEX**
- Molten salt pyrolysis of latex --- synthetic hydrocarbon fuel production using the Guayule shrub
[NASA-CASE-NPO-14315-1] c27 N81-17261
- Process for preparation of large-particle-size monodisperse latexes
[NASA-CASE-MFS-25000-1] c25 N81-19242
- LATHES**
- Rotary spindle lathe attachments for machining geometrical cones
[NASA-CASE-XMS-04292] c15 N71-22722
- Lathe tool and holder combination for machining resin impregnated fiberglass cloth laminates
[NASA-CASE-XLA-10470] c15 N72-21489
- LAUNCH ESCAPE SYSTEMS**
- Emergency escape cabin system for launch towers
[NASA-CASE-XKS-02342] c05 N71-11199
- Ejector for separating astronaut from ejection seat during prelaunch or initial launch phase of flight
[NASA-CASE-XMS-04625] c05 N71-20718
- LAUNCH VEHICLE CONFIGURATIONS**
- Rotating launch device for a remotely piloted aircraft
[NASA-CASE-ARC-10979-1] c09 N77-19076
- LAUNCH VEHICLES**
- Support techniques for restraint of slender bodies such as launch vehicles
[NASA-CASE-XLA-02704] c11 N69-21540
- Microleak detector mounted on weld seam of propellant tank of launch vehicle
[NASA-CASE-XMF-02307] c14 N71-10779
- LAUNCHING PADS**
- Launch pad missile release system with bending moment change rate reduction in thrust distribution structure at liftoff
[NASA-CASE-XMF-03198] c30 N70-40353
- Remotely actuated quick disconnect for tubular umbilical conduits used to transfer fluids from ground to rocket vehicle
[NASA-CASE-XLA-01396] c03 N71-12259
- Portable equipment for validating C band launch pad antennas and transmission lines used for spacecraft checkout
[NASA-CASE-XKS-10543] c07 N71-26292
- LAY-UP**
- Method of making a partial interlaminar separation composite system
[NASA-CASE-LAR-12065-2] c24 N81-33235
- LAYERS**
- Atomic hydrogen storage method and apparatus
[NASA-CASE-LFW-12081-1] c28 N78-24365
- LEACHING**
- Process for the leaching of AP from propellant
[NASA-CASE-NFO-14109-1] c28 N80-23471
- LEAD (METAL)**
- Lead-oxygen dc power supply system having a closed loop oxygen and water system
[NASA-CASE-MFS-23059-1] c44 N76-27664
- Catalyst surfaces for the chronous/chronic redox couple
[NASA-CASE-LFW-13148-2] c44 N81-29524
- LEAD TELLURIDES**
- Bonding method for improving contact between lead telluride thermoelectric elements and tungsten electrodes
[NASA-CASE-XGS-04554] c15 N69-39786
- Procedure for segmenting lead telluride and silicon germanium thermoelectric elements to obtain composite elements effective over wide temperature range
[NASA-CASE-XGS-05718] c26 N71-16037
- LEADING EDGE FLAPS**
- Leading edge vortex flaps for drag reduction --- during subsonic flight
[NASA-CASE-LAR-12750-1] c02 N81-19016
- LEADING EDGES**
- Leading edge design for hypersonic reentry vehicles
[NASA-CASE-XLA-00165] c31 N70-33242
- Construction of leading edges of surfaces for aerial vehicles performing from subsonic to above transonic speeds
[NASA-CASE-XLA-01486] c01 N71-23497
- Leading edge protection for composite blades
[NASA-CASE-LFW-12550-1] c24 N77-19170
- LEAKAGE**
- Rocket chamber leak test fixture using tubular plug
[NASA-CASE-XFR-09479] c14 N69-27503
- Microleak detector mounted on weld seam of propellant tank of launch vehicle
[NASA-CASE-XMF-02307] c14 N71-10779
- Fluid leakage detection system with automatic monitoring capability
[NASA-CASE-LAR-10323-1] c12 N71-17573
- Space suit using nonflexible material with low leakage and providing protection against thermal extremes, physical punctures, and radiation with high mobility articulation
[NASA-CASE-XAC-07043] c05 N71-23161
- Development of apparatus and method for testing leakage of large tanks
[NASA-CASE-XMF-02392] c32 N71-24285
- Gas leak detection in evacuated systems using ultraviolet radiation probe
[NASA-CASE-ERC-10034] c15 N71-24896
- Method for locating leaks in hermetically sealed containers
[NASA-CASE-ERC-10045] c15 N71-24910
- Volume displacement transducer for leak detection in hermetically sealed semiconductor devices
[NASA-CASE-ERC-10033] c14 N71-26672
- Test chambers with orifice and helium mass spectrometer for detecting leak rate of encapsulated semiconductor devices
[NASA-CASE-ERC-10150] c14 N71-28992
- Leak detector
[NASA-CASE-MFS-21761-1] c35 N75-15931
- Vacuum leak detector
[NASA-CASE-LAR-11237-1] c35 N75-19612
- Low heat leak connector for cryogenic system
[NASA-CASE-XLE-02367-1] c31 N79-21225
- LEG (ANATOMY)**
- Actuator device for artificial leg
[NASA-CASE-MFS-23225-1] c52 N77-14735
- Rotational joint assembly for the prosthetic leg
[NASA-CASE-KSC-11004-1] c54 N77-30749
- Mechanical energy storage device for hip disarticulation
[NASA-CASE-ARC-10916-1] c52 N78-10686
- LENS DESIGN**
- Chromatically corrected virtual image display --- lens design for flight simulators
[NASA-CASE-LAR-12251-1] c74 N79-14892
- LENSES**
- Lens assembly for solar furnace or solar simulator
[NASA-CASE-XMF-04111] c14 N71-15622
- Camera adapter design for image magnification including lens and illuminator
[NASA-CASE-XMF-03844-1] c14 N71-26474
- Development and characteristics of Petzval type objective including field shaping lens for focusing light of specified wavelength band on curved photoreceptor
[NASA-CASE-GSC-10700] c23 N71-30027
- Noise elimination in coherent imaging system by axial rotation of optical lens for spectral distribution of degrading affects
[NASA-CASE-GSC-11133-1] c23 N72-11568
- Plural beam antenna with parabolic reflectors
[NASA-CASE-GSC-11013-1] c09 N73-19234
- Spatial filter for Q-switched lasers
[NASA-CASE-LFW-12164-1] c36 N77-32478
- Process for producing a well-adhered durable optical coating on an optical plastic substrate --- abrasion resistant polymethyl methacrylate lenses
[NASA-CASE-ARC-11039-1] c74 N78-32854
- Scanning afocal laser velocimeter projection lens system
[NASA-CASE-LAR-12328-1] c74 N80-12866
- Constant magnification optical tracking system
[NASA-CASE-NFO-14813-1] c74 N80-24152
- Chromatically corrected virtual image visual display --- reducing eye strain in flight simulators

- [NASA-CASE-LAR-12251-1] c74 N80-27185
Interferometric angle monitor
[NASA-CASE-GSC-12614-1] c35 N81-12386
- LENTICULAR BODIES**
Lenticular vehicle with foldable aerodynamic control flaps and reaction jets for operation above and within earth's atmosphere
[NASA-CASE-XGS-00260] c31 N70-37924
- LEVEL (HORIZONTAL)**
Hot-wire liquid level detector for cryogenic propellants
[NASA-CASE-XLE-00454] c23 N71-17802
Rotary leveling base platform
[NASA-CASE-ARC-10981-1] c37 N78-27425
- LEVEL (QUANTITY)**
Gauge for measuring quantity of liquid in spherical tank in reduced gravity
[NASA-CASE-XMS-06236] c14 N71-21007
Conversion of positive dc voltage to positive dc voltage of lower amplitude
[NASA-CASE-XMF-14301] c09 N71-23188
- LEVELING**
Development of adjustable attitude guide block for setting pins perpendicular to irregular convex work surface
[NASA-CASE-XLA-07911] c15 N71-15571
Electrical switching device comprising conductive liquid confined within square loop of deformable nonconductive tubing also used for leveling
[NASA-CASE-NPO-10037] c09 N71-19610
Adjustable support device with jacket screw for altering distance between base and supported member
[NASA-CASE-NPO-10721] c15 N72-27484
Automatically operable self-leveling load table
[NASA-CASE-MFS-22039-1] c09 N75-12568
- LEVITATION**
Containerless melting and rapid solidification apparatus and method
[NASA-CASE-MFS-25305-1] c35 N81-16427
- LIPE (DURABILITY)**
Hollow rolling element bearings
[NASA-CASE-LEW-11087-3] c37 N74-21064
- LIPE DETECTORS**
Use of enzyme hexokinase and glucose to reduce inherent light levels of ATP in luciferase compositions
[NASA-CASE-XGS-05533] c04 N69-27487
Describing method for lyophilization of luciferase containing mixtures for use in life detection reactions
[NASA-CASE-XGS-05532] c06 N71-17705
- LIPE RAFTS**
Design of inflatable life raft for aircrafts and boats
[NASA-CASE-XMS-00863] c05 N70-34657
Inflatable stabilizing system for use on life raft to reduce rocking and preclude capsizing
[NASA-CASE-MSC-12393-1] c02 N73-26006
Modification of one man life raft
[NASA-CASE-LAR-10241-1] c54 N74-14845
- LIPE SUPPORT SYSTEMS**
Shock absorbing couch for body support under high acceleration or deceleration forces
[NASA-CASE-XMS-01240] c05 N70-35152
Portable environmental control and life support system for astronaut in and out of spacecraft
[NASA-CASE-XMS-09632-1] c05 N71-11203
Design and development of flexible tunnel for use by spacecrews in performing extravehicular activities
[NASA-CASE-MSC-12243-1] c05 N71-24728
Development of improved convolute section for pressurized suits to provide high degree of mobility in response to minimum of applied torque
[NASA-CASE-XMS-09637-1] c05 N71-24730
Development and characteristics of inflatable structure to provide escape from orbit for spacecrews under emergency conditions
[NASA-CASE-XMS-06162] c31 N71-28851
Chlorine generator for purifying water in life support systems of manned spacecraft
[NASA-CASE-XLA-08913] c14 N71-28533
Open loop life support subsystem using breathing bag as reservoir for EVA
[NASA-CASE-MSC-12411-1] c05 N72-20096
- Device for removing air from water for use in life support systems in manned space flight
[NASA-CASE-XLA-8914] c15 N73-12492
Intra- and extravehicular life support space suite for Apollo astronauts
[NASA-CASE-MSC-12609-1] c05 N73-32012
Catalyst cartridge for carbon dioxide reduction unit
[NASA-CASE-LAR-10551-1] c25 N74-12813
Helmet feedport
[NASA-CASE-XMS-09653] c54 N78-17680
Cooling system for removing metabolic heat from an hermetically sealed spacesuit
[NASA-CASE-ARC-11059-1] c54 N78-32721
Improved low-drag ground vehicle particularly suited for use in safely transporting livestock
[NASA-CASE-FRC-11058-1] c85 N80-33312
- LIFT DEVICES**
Device for handling heavy loads by distributing forces
[NASA-CASE-XMP-04969] c11 N69-27466
Techniques for recovery of multistage rocket vehicles by providing lifting surfaces on individual sections
[NASA-CASE-XMP-00389] c31 N70-34176
Direct lift control system having flaps with slots adjacent to their leading edge and particularly adapted for lightweight aircraft
[NASA-CASE-LAR-10249-1] c02 N71-26110
Development of auxiliary lifting system to provide ferry capability for entry vehicles
[NASA-CASE-LAR-10574-1] c11 N73-13257
High lift aircraft --- with improved stability, control, performance, and noise characteristics
[NASA-CASE-LAR-11252-1] c05 N75-25914
Device for installing rocket engines
[NASA-CASE-MFS-19220-1] c20 N76-22296
Vortex-lift roll-control device
[NASA-CASE-LAR-11868-2] c08 N79-14108
- LIFT DRAG RATIO**
Design of ring wing vehicle of high drag-to-weight ratio to withstand reentry stress into low density atmosphere
[NASA-CASE-XLA-04901] c31 N71-24315
An annular wing
[NASA-CASE-FRC-11007-2] c02 N79-24959
- LIFTING BODIES**
Techniques for recovery of multistage rocket vehicles by providing lifting surfaces on individual sections
[NASA-CASE-XMP-00389] c31 N70-34176
Graphic illustration of lifting body design
[NASA-CASE-FRC-10063] c01 N71-12217
Static force balancing system attached to lifting body
[NASA-CASE-LAR-10348-1] c11 N73-12264
- LIFTING REENTRY VEHICLES**
Lenticular vehicle with foldable aerodynamic control flaps and reaction jets for operation above and within earth's atmosphere
[NASA-CASE-XGS-00260] c31 N70-37924
Variable geometry manned orbital vehicle having high aerodynamic efficiency over wide speed range and incorporating auxiliary pivotal wings
[NASA-CASE-XLA-03691] c31 N71-15674
Designing spacecraft for flight into space, atmospheric reentry, and landing at selected sites
[NASA-CASE-XAC-02058] c02 N71-16087
- LIGHT (VISIBLE RADIATION)**
Light baffle with oblate hemispheroid surface and shading flange
[NASA-CASE-NPO-10337] c14 N71-15604
Maksutov spectrograph for low light level research
[NASA-CASE-XLA-10402] c14 N71-29041
Device for detection of combustion light preceding gaseous explosions
[NASA-CASE-LAR-10739-1] c14 N73-16484
- LIGHT AIRCRAFT**
Direct lift control system having flaps with slots adjacent to their leading edge and particularly adapted for lightweight aircraft
[NASA-CASE-LAR-10249-1] c02 N71-26110
- LIGHT AMPLIFIERS**
High power metallic halide laser
[NASA-CASE-NPO-14782-1] c36 N80-18381
- LIGHT BEAMS**
Cylindrical reflector for resolving wide angle light beam from telescope into narrow beam for

spectroscopic analysis
[NASA-CASE-XGS-08269] c23 N71-26206

Development and characteristics of optical communications system based on modulation of light beams
[NASA-CASE-XLA-01090] c16 N71-28963

Multiple pattern holographic information storage and readout system
[NASA-CASE-ERC-10151] c16 N71-29131

Constant magnification optical tracking system
[NASA-CASE-NPO-14813-1] c74 N80-24152

Rhomboid prism pair for rotating the plane of parallel light beams --- laser velocimeters
[NASA-CASE-ARC-11311-1] c74 N81-16882

LIGHT GAS GUNS
Implosion driven, light gas, hypervelocity gun
[NASA-CASE-XAC-05902] c11 N71-18578

LIGHT MODULATION
Optical retrodirective modulator with focus spoiling reflector driven by modulation signal
[NASA-CASE-GSC-10062] c14 N71-15605

Modulating and controlling intensity of light beam from high temperature source by servocontrolled rotating cylinders
[NASA-CASE-XMS-04300] c09 N71-19479

Method and apparatus for optically modulating light or microwave beam
[NASA-CASE-GSC-10216-1] c23 N71-26722

Development and characteristics of optical communications system based on modulation of light beams
[NASA-CASE-XLA-01090] c16 N71-28963

Lamp modulator for generating visual indication of presence and magnitude of signal
[NASA-CASE-KSC-10565] c09 N72-25250

Polarization compensator for optical communications
[NASA-CASE-GSC-11782-1] c74 N76-30053

Method and apparatus for Doppler frequency modulation of radiation
[NASA-CASE-NFO-14524-1] c32 N80-24510

Collimated beam manifold and method for using the same --- laser beams
[NASA-CASE-MFS-25312-1] c74 N80-34251

Fluorescent radiation converter
[NASA-CASE-GSC-12528-1] c74 N81-24900

LIGHT SCATTERING
Forward-scatter polarimeter for determining the gaseous depolarization factor in the presence of polluting polydispersed particles
[NASA-CASE-NPO-13756-1] c35 N76-14434

The 2 deg/90 deg laboratory scattering photometer --- particulate refractivity in hydrosols
[NASA-CASE-GSC-12088-1] c74 N78-13874

LIGHT SCATTERING METERS
System for the measurement of ultra-low stray light levels --- determining the adequacy of large space telescope systems
[NASA-CASE-MFS-23513-1] c74 N79-11865

LIGHT SOURCES
Light radiation direction indicator with baffle of two parallel grids
[NASA-CASE-XNP-03930] c14 N69-24331

High intensity heat and light unit containing quartz lamp elements protectively positioned to withstand severe environmental stress
[NASA-CASE-XLA-00141] c09 N70-33312

Photosensitive light source device for detecting unmanned spacecraft deviation from reference attitude
[NASA-CASE-XNP-00438] c21 N70-35089

Electro-optical detector for determining position of light source
[NASA-CASE-XNP-01059] c23 N71-21821

Optical system for selecting particular wavelength light beams from multiple wavelength light source
[NASA-CASE-ERC-10248] c14 N72-17323

Electro-optical stabilization of calibrated light source
[NASA-CASE-HSC-12293-1] c14 N72-27411

Development of temperature compensated light source with components and circuitry for maintaining luminous intensity independent of temperature variations
[NASA-CASE-ARC-10467-1] c09 N73-14214

Interferometer prism and control system for precisely determining direction to remote light source

[NASA-CASE-ARC-10278-1] c14 N73-25463

Attitude sensor
[NASA-CASE-LAR-10586-1] c19 N74-15089

Very high intensity light source using a cathode ray tube --- electron beams
[NASA-CASE-XNP-01296] c33 N75-27250

Electric arc light source having undercut recessed anode
[NASA-CASE-ARC-10266-1] c33 N75-29318

Uniform variable light source
[NASA-CASE-NPO-11429-1] c74 N77-21941

LIGHT TRANSMISSION
Hybrid holographic system using reference, transmitted, and reflected beams simultaneously
[NASA-CASE-MFS-20074] c16 N71-15565

Optical characteristics measuring apparatus
[NASA-CASE-XNP-08840] c23 N71-16365

Optical monitor panel consisting of translucent screen with test or meter information projected onto it from rear for application in control rooms of missile launching and tracking stations
[NASA-CASE-XKS-03509] c14 N71-23175

Solar cell panel with light transmitting cover plate
[NASA-CASE-NFO-10747] c03 N72-22042

Method and system for transmitting and distributing optical frequency radiation
[NASA-CASE-HQN-10541-3] c23 N72-23695

Thin absorbing metallic film for increased visible light transmission
[NASA-CASE-LAR-10836-1] c26 N72-27784

Transmitting and reflecting diffuser --- for ultraviolet light
[NASA-CASE-LAR-10385-2] c70 N74-13436

Optical instrument employing reticle having preselected visual response pattern formed thereon
[NASA-CASE-ARC-10976-1] c74 N77-22950

Transmitting and reflecting diffuser --- using ultraviolet grade fused silica coatings
[NASA-CASE-LAR-10385-3] c74 N78-15879

LIGHTING EQUIPMENT
Sealed fluorescent tube light unit capable of connection with other units to form string of work lights
[NASA-CASE-XKS-05932] c09 N71-26787

Pressurized inert gas feed for lighting system
[NASA-CASE-KSC-10644] c09 N72-27227

Remote lightning monitor system
[NASA-CASE-KSC-11031-1] c33 N79-11315

Power converter --- for display devices, lighting equipment
[NASA-CASE-FRC-11014-1] c33 N79-27395

LIGHTNING
Apparatus for determining distance to lightning strokes from single station by magnetic and electric field sensing antennas
[NASA-CASE-KSC-10698] c07 N73-20175

System for locating lightning strokes by coordination of directional antenna signals
[NASA-CASE-KSC-10729-1] c09 N73-32110

Monitoring and recording lightning strokes in predetermined area
[NASA-CASE-KSC-10728-1] c14 N73-32319

Lightning current measuring systems
[NASA-CASE-KSC-10807-1] c33 N75-26246

Lightning current waveform measuring system
[NASA-CASE-KSC-11018-1] c33 N79-10337

Lightning current detector
[NASA-CASE-KSC-11057-1] c33 N79-14305

Lightning discharge identification system
[NASA-CASE-KSC-11099-1] c33 N79-25313

LIMBS (ANATOMY)
Prosthesis coupling
[NASA-CASE-KSC-11069-1] c52 N79-26772

Apparatus for determining changes in limb volume
[NASA-CASE-MSC-18759-1] c52 N81-24716

LIMITER CIRCUITS
Variable duration pulse integrator design for integrating pulse duration modulated pulses with elimination of ripple content
[NASA-CASE-XLA-01219] c10 N71-23084

Circuits for amplitude limiting of random noise inputs
[NASA-CASE-NFO-10169] c10 N71-24844

Velocity limiting safety system for motor driven research vehicle
[NASA-CASE-XLA-07473] c15 N71-24895

- Low level signal limiter
[NASA-CASE-XLB-04791] c32 N74-22096
- Inrush current limiter
[NASA-CASE-GSC-11789-1] c33 N77-14333
- LINE SPECTRA**
Stark cell optoacoustic detection of constituent gases in sample
[NASA-CASE-NPO-14143-1] c25 N81-14015
- LINEAR ACCELERATORS**
Linear accelerator frequency control system
[NASA-CASE-XGS-05441] c10 N71-22962
- LINEAR ARRAYS**
Multispectral imaging and analysis system --- using charge coupled devices and linear arrays
[NASA-CASE-NPO-13691-1] c43 N79-17288
- LINEAR RECEIVERS**
Antenna array at focal plane of reflector with coupling network for beam switching
[NASA-CASE-GSC-10220-1] c07 N71-27233
- LINEAR SYSTEMS**
Linear three-tap feedback shift register
[NASA-CASE-NPO-10351] c08 N71-12503
Family of m-ary linear feedback shift register with binary logic
[NASA-CASE-NPO-11868] c10 N73-20254
- LINEARITY**
Semilinear bearing comprising two rows of roller bearings separated by spherical bearings and permitting rotational and translational movement
[NASA-CASE-XLA-02809] c15 N71-22582
Mechanical actuator wherein linear motion changes to rotational motion
[NASA-CASE-XGS-04548] c15 N71-24045
Linear magnetic bearing
[NASA-CASE-GSC-12517-1] c33 N81-22279
- LINING PROCESSES**
Fully plasma-sprayed compliant backed ceramic turbine seal
[NASA-CASE-LEW-13268-1] c37 N80-24619
- LINKAGES**
Development of collapsible nozzle extension for rocket engines
[NASA-CASE-MFS-11497] c28 N71-16224
Design and construction of mechanical probe for determining if object is properly secured
[NASA-CASE-MFS-20760] c14 N72-33377
Locking redundant link
[NASA-CASE-LAR-11900-1] c37 N79-14382
Compensating linkage for main rotor control
[NASA-CASE-LAR-11797-1] c05 N81-19087
- LIQUEFACTION**
Ophthalmic liquifaction pump
[NASA-CASE-LEW-12051-1] c52 N75-33640
- LIQUID BEARINGS**
Fatigue life of hybrid antifriction bearings at ultrahigh speeds
[NASA-CASE-LEW-11152-1] c15 N73-32359
- LIQUID COOLING**
Water cooled contactors for holding rotating carbon arc anode
[NASA-CASE-XMS-03700] c15 N69-24266
External device for liquid spray cooling of gas turbine blades
[NASA-CASE-XLE-00037] c28 N70-33372
Water cooled solenoid capable of producing magnetic field intensities up to 100 kilogauss
[NASA-CASE-XNP-01951] c09 N70-41929
Laminar flow of liquid coolants in rocket engines
[NASA-CASE-NPO-10122] c12 N71-17631
Space suit body heat exchanger design composed of thermal conductance yarn and liquid coolant loops
[NASA-CASE-XMS-09571] c05 N71-19439
Electric power system with circulatory liquid coolant cooling system
[NASA-CASE-MFS-14114-2] c09 N71-24807
Electric power system with thermionic diodes and circulatory liquid metal coolant lines
[NASA-CASE-MFS-14114] c33 N71-27862
Apparatus for liquid spray cooling of turbine blades
[NASA-CASE-XLE-00027] c33 N71-29152
Automatic control device for regulating inlet water temperature of liquid cooled spacesuit
[NASA-CASE-MSC-13917-1] c05 N72-15698
Automatic temperature control for liquid cooled space suit
[NASA-CASE-ABC-10599-1] c05 N73-26071
- Heat exchanger system and method
[NASA-CASE-LAR-10799-2] c34 N76-17317
Liquid cooled brassiere and method of diagnosing malignant tumors therewith
[NASA-CASE-ABC-11007-1] c52 N77-14736
Closed loop spray cooling apparatus --- for particle accelerator targets
[NASA-CASE-LEW-11981-1] c31 N78-17237
- LIQUID CRYSTALS**
Development of combined velocimeter and accelerometer based on color changes in liquid crystalline material subjected to shear stresses
[NASA-CASE-ERC-10292] c14 N72-25410
Input signal measurement using liquid crystalline elements
[NASA-CASE-ERC-10275] c26 N72-25680
- LIQUID FILLED SHELLS**
Liquid rocket systems for propulsion and control of spacecraft
[NASA-CASE-XNP-00610] c28 N70-36910
Design and development of fluid sample collector
[NASA-CASE-XMS-06767-1] c14 N71-20435
Manufacture of fluid containers from fused coated polyester sheets having resealable septum
[NASA-CASE-NPO-10123] c15 N71-24835
Omnidirectional liquid filled accelerometer design with liquid and housing temperature compensation
[NASA-CASE-BQN-10780] c14 N71-30265
- LIQUID FLOW**
Reduced gravity liquid configuration simulator to study propellant behavior in rocket fuel tanks
[NASA-CASE-XLE-02624] c12 N69-39988
Liquid junction for glass electrode or pH meters
[NASA-CASE-NPO-10682] c15 N70-34699
Actuator using compressed gas as driving force to control valve handling large liquid flows
[NASA-CASE-XHQ-01208] c15 N70-35409
Two component valve assembly for cryogenic liquid transfer regulation
[NASA-CASE-XLE-00397] c15 N70-36492
Positive displacement flowmeter for measuring extremely low flows of fluid with self calibrating features
[NASA-CASE-XMP-02822] c14 N70-41994
High pressure liquid flow sight assembly for wide temperature range applications including cryogenic fluids
[NASA-CASE-XLE-02998] c14 N70-42074
Carrier liquid system containing bodies of ablative material
[NASA-CASE-LEW-10359-2] c33 N73-25952
Zero gravity liquid transfer device, using spiral shaped screen
[NASA-CASE-KSC-10626] c14 N73-27378
System for measuring Reynolds in a turbulently flowing fluid --- signal processing
[NASA-CASE-ABC-10755-2] c34 N76-27517
- LIQUID HELIUM**
Heat operated cryogenic electrical generator
[NASA-CASE-NPO-13303-1] c20 N75-24837
Helium refrigerator
[NASA-CASE-NPO-13435-1] c31 N76-14284
Cryostat system for temperatures on the order of 2 deg K or less
[NASA-CASE-NPO-13459-1] c31 N77-10229
Multistation refrigeration system
[NASA-CASE-NPO-13839-1] c31 N78-25256
Stabilization of He2(a 3 Sigma u+ molecules in liquid helium by optical pumping for vacuum UV laser 6
[NASA-CASE-NPO-13993-1] c72 N79-13826
Low cost cryostat
[NASA-CASE-NPO-14513-1] c35 N81-14287
- LIQUID HYDROGEN**
Development of thermal insulation material for insulating liquid hydrogen tanks in spacecraft
[NASA-CASE-XMF-05046] c33 N71-28892
Reinforced polyquinoxaline gasket and method of preparing the same --- resistant to ionizing radiation and liquid hydrogen temperatures
[NASA-CASE-MFS-21364-1] c37 N74-18126
- LIQUID INJECTION**
Thrust vector control by secondary injection of fluid into rocket nozzle flow field to separate exhaust flow
[NASA-CASE-XLE-00208] c28 N70-34294

System for aerodynamic control of rocket vehicles by secondary injection of fluid into nozzle exhaust stream
[NASA-CASE-XLA-01163] c21 N71-15582

Propellant injection assembly having individually removable and replaceable nozzles for liquid fueled rocket engines
[NASA-CASE-XNP-00968] c28 N71-15660

Sodium storage and injection system
[NASA-CASE-NPO-14384-1] c37 N80-10494

Method of producing silicon --- gas phase reactor multiple injector liquid feed system
[NASA-CASE-NPO-14382-1] c31 N80-18231

LIQUID LASERS

Method and apparatus using temperature control for wavelength tuning of liquid lasers
[NASA-CASE-ERC-10187] c16 N69-31343

LIQUID LEVELS

Inductive liquid level detection system
[NASA-CASE-XLE-01609] c14 N71-10500

Apparatus for fiber optic liquid level sensing
[NASA-CASE-MSC-18674-1] c74 N81-24907

LIQUID METALS

Magnetohydrodynamic generator for mixing nonconductive gas and liquid metal mist to form slugs
[NASA-CASE-XLE-02083] c03 N69-39583

Thermoelectric power conversion by liquid metal flowing through magnetic field
[NASA-CASE-XNP-00644] c03 N70-36803

Analytical test apparatus and method for determining oxygen content in alkali liquid metal
[NASA-CASE-XLE-01997] c06 N71-23527

Electric power system with thermionic diodes and circulatory liquid metal coolant lines
[NASA-CASE-MFS-14114] c33 N71-27862

Flexible barrier membrane comprising porous substrate and incorporating liquid gallium or indium metal used as sealant barriers for spacecraft walls and pumping liquid propellants
[NASA-CASE-XNP-08881] c17 N71-28747

Shell-side liquid metal boiler employing tube and shell heat exchanger
[NASA-CASE-NPO-10831] c33 N72-20515

U shaped heated tube for distillation and purification of liquid metals
[NASA-CASE-XNP-08124-2] c06 N73-13129

Electromagnetic flow rate meter --- for liquid metals
[NASA-CASE-LEW-10981-1] c35 N74-21018

Process for preparing liquid metal electrical contact device
[NASA-CASE-LEW-11978-1] c33 N77-26385

Liquid metal slip ring
[NASA-CASE-LEW-12277-2] c33 N78-25323

Solar driven liquid metal MHD power generator
[NASA-CASE-LAR-12495-1] c44 N81-32609

LIQUID NITROGEN

Transferring liquid nitrogen through vacuum chamber to cryopanel
[NASA-CASE-LAR-10031] c15 N72-22484

LIQUID OXYGEN

Dye penetrant and technique for nondestructive tests of solid surfaces contacted by liquid oxygen
[NASA-CASE-XNP-02221] c18 N71-27170

LIQUID PHASES

Method and feed system for separating and orienting liquid and vapor phases of liquid propellants in zero gravity environment
[NASA-CASE-XLE-01182] c27 N71-15635

Hydraulic apparatus for casting and molding of liquid polymers
[NASA-CASE-XNP-07659] c06 N71-22575

Mixed liquid and vapor phase analyzer design with thermocouples for relative heat transfer measurement
[NASA-CASE-NPO-10691] c14 N71-26199

Cryogenic liquid sensor
[NASA-CASE-NPO-10619-1] c35 N77-21393

LIQUID PROPELLANT ROCKET ENGINES

High thrust annular liquid propellant rocket engine and exhaust nozzle design
[NASA-CASE-XLE-00078] c28 N70-33284

Attitude and propellant flow control system for liquid propellant rocket vehicles
[NASA-CASE-XNP-00185] c21 N70-34539

Injector manifold assembly for bipropellant rocket engines providing for fuel propellant to serve as coolant
[NASA-CASE-XNP-00148] c28 N70-38710

Collapsible auxiliary tank for restarting liquid propellant rocket motors under zero gravity
[NASA-CASE-XNP-01390] c28 N70-41275

Supersonic-combustion rocket
[NASA-CASE-LEW-11058-1] c20 N74-13502

Space vehicle
[NASA-CASE-MFS-22734-1] c18 N75-19329

Low thrust monopropellant engine --- low temperature environments
[NASA-CASE-GSC-12194-2] c20 N79-15151

Fluid thrust control system --- for liquid propellant rocket engines
[NASA-CASE-XNP-05964-1] c20 N79-21124

Rocket injector head
[NASA-CASE-XNP-04592-1] c20 N79-21125

LIQUID ROCKET PROPELLANTS

Propellant injectors for rocket combustion chambers
[NASA-CASE-XLE-00103] c28 N70-33241

Liquid rocket systems for propulsion and control of spacecraft
[NASA-CASE-XNP-00610] c28 N70-36910

Igniter capsule for chemical ignition of liquid rocket propellants
[NASA-CASE-XLE-00323] c28 N70-38505

High temperature spark plug for igniting liquid rocket propellants
[NASA-CASE-XLE-00660] c28 N70-39925

Compact high pressure filter for rocket fuel lines
[NASA-CASE-XNP-00732] c28 N70-41447

Venting device for liquid propellant storage tank using magnetic field to separate liquid and gaseous phases
[NASA-CASE-XLE-01449] c15 N70-41646

Liquid propellant tank design with semitoroidal bulkhead
[NASA-CASE-XNP-01899] c31 N70-41948

Method and feed system for separating and orienting liquid and vapor phases of liquid propellants in zero gravity environment
[NASA-CASE-XLE-01182] c27 N71-15635

Control valve and coaxial variable injector for controlling bipropellant mixture ratio and flow
[NASA-CASE-XNP-09702] c15 N71-17654

Slosh and swirl alleviator for liquid propellant tanks during transport and flight
[NASA-CASE-XLA-05749] c15 N71-19569

Filler valve design for supplying liquid propellants at high pressure to space vehicles
[NASA-CASE-XNP-01747] c15 N71-23024

Electronic recording system for spatial mass distribution of liquid rocket propellant droplets or vapors ejected from high velocity nozzles
[NASA-CASE-NPO-10185] c10 N71-26339

Flexible barrier membrane comprising porous substrate and incorporating liquid gallium or indium metal used as sealant barriers for spacecraft walls and pumping liquid propellants
[NASA-CASE-XNP-08881] c17 N71-28747

Response analyzing apparatus for liquid vapor interface sensor of sloshing rocket propellant
[NASA-CASE-MFS-11204] c14 N71-29134

Passive propellant system
[NASA-CASE-MFS-23642-1] c20 N80-10278

Supercharged topping rocket propellant feed system
[NASA-CASE-XLE-02062-1] c20 N80-14188

LIQUID SLOSHING

Slosh damping method for liquid rocket propellant tanks
[NASA-CASE-XNP-00658] c12 N70-38997

Flexible ring slosh damping baffle for spacecraft fuel tank
[NASA-CASE-LAR-10317-1] c32 N71-16103

Submerged fuel tank baffles to prevent sloshing in liquid propellant rocket flight
[NASA-CASE-XLA-04605] c32 N71-16106

Hot-wire liquid level detector for cryogenic propellants
[NASA-CASE-XLE-00454] c23 N71-17802

Slosh and swirl alleviator for liquid propellant tanks during transport and flight
[NASA-CASE-XLA-05749] c15 N71-19569

Pressure sensor network for measuring liquid dynamic response in flight including fuel tank

acceleration, liquid slosh amplitude, and fuel depth monitoring
[NASA-CASE-XLA-05541] c12 N71-26387

LIQUID SODIUM
Sodium storage and injection system
[NASA-CASE-NPO-14384-1] c37 N80-10494

LIQUID-GAS MIXTURES
Liquid-gas separator adapted for use in zero gravity environment - drawings
[NASA-CASE-XMS-01624] c15 N70-40062
Absorbent apparatus for separating gas from liquid-gas stream used in environmental control under zero gravity conditions
[NASA-CASE-XMS-01492] c05 N70-41297
Venting device for liquid propellant storage tank using magnetic field to separate liquid and gaseous phases
[NASA-CASE-XLE-01449] c15 N70-41646
Liquid-gaseous centrifugal separator for weightlessness environment
[NASA-CASE-XLA-00415] c15 N71-16079
Vapor-liquid separator design with vapor driven pump for separated liquid pumping for application in propellant transfer
[NASA-CASE-XMF-04042] c15 N71-23023

LIQUID-VAPOR INTERFACES
Describing apparatus for separating gas from cryogenic liquid under zero gravity and for venting gas from fuel tank
[NASA-CASE-XLE-00586] c15 N71-15968
Liquid-vapor interface seal design for turbine rotating shafts including helical and molecular pumps and liquid cooling of mercury vapor
[NASA-CASE-XNP-02862-1] c15 N71-26294
Response analyzing apparatus for liquid vapor interface sensor of sloshing rocket propellant
[NASA-CASE-MFS-11204] c14 N71-29134

LIQUIDS
Liquid-gas separator adapted for use in zero gravity environment - drawings
[NASA-CASE-XMS-01624] c15 N70-40062
Electrical switching device comprising conductive liquid confined within square loop of deformable nonconductive tubing also used for leveling
[NASA-CASE-NPO-10037] c09 N71-19610
Purification apparatus for vaporization and fractional distillation of liquids
[NASA-CASE-XNP-08124] c15 N71-27184
Quantitative liquid measurements in container by resonant frequencies
[NASA-CASE-XNP-02500] c18 N71-27397
Resonant infrasonic gauging device for measuring liquid quantity in closed bladderless reservoir
[NASA-CASE-MSC-11847-1] c14 N72-11363
Ablative system with liquid carrying ablative material bodies and forming self-replacing ablative surface
[NASA-CASE-LBN-10359] c33 N72-25511
Pressurized tank for feeding liquid waste into processing equipment
[NASA-CASE-LAR-10365-1] c05 N72-27102
Apparatus for mixing two or more liquids under zero gravity conditions
[NASA-CASE-LAR-10195-1] c15 N73-19458
Bimetallic fluid displacement apparatus --- for stirring and heating stored gases and liquids
[NASA-CASE-ARC-10441-1] c35 N74-15126
Method and device for detection of surface discontinuities or defects
[NASA-CASE-MSC-14187-1] c35 N74-32879
Automatic liquid inventory collecting and dispensing unit
[NASA-CASE-LAR-11071-1] c35 N75-19611
Thermal energy storage system --- operating on superheating of liquids
[NASA-CASE-MFS-23167-1] c44 N76-31667
Low gravity phase separator
[NASA-CASE-MSC-14773-1] c35 N78-12390
Automatic fluid dispenser
[NASA-CASE-ARC-10820-1] c35 N78-19466
Liquid-immersible electrostatic ultrasonic transducer
[NASA-CASE-LAR-12465-1] c35 N80-18363
System for monitoring physical characteristics of fluids. --- acoustic techniques
[NASA-CASE-NPO-15400-1] c34 N81-24384

LITHIUM COMPOUNDS

Utilization of lithium p-lithiphenoxide to prepare star polymers
[NASA-CASE-NFO-10998-1] c06 N73-32029

LOAD DISTRIBUTION (FORCES)
Force measuring instrument for structural members, particularly fastening bolts or studs
[NASA-CASE-XMF-00456] c14 N70-34705
Multiple Belleville spring assembly with even load distribution
[NASA-CASE-XNP-00840] c15 N70-38225
Device for use in loading tension members --- characterized by elongated elastic body
[NASA-CASE-MFS-21488-1] c14 N75-24794
Pneumatic load compensating or controlling system
[NASA-CASE-ARC-10907-1] c37 N75-32465

LOAD TESTING MACHINES
Load cell protection device using spring-loaded breakaway mechanism
[NASA-CASE-XMS-06782] c32 N71-15974
Development of device for transferring load from load cell to bypass mechanism
[NASA-CASE-XMS-06329-1] c15 N71-20441
Method and apparatus for tensile testing of metal foil
[NASA-CASE-LAR-10208-1] c35 N76-18400
Fatigue failure load indicator
[NASA-CASE-LAR-12027-1] c39 N79-22537

LOAD TESTS
Differential pressure cell insensitive to changes in ambient temperature and extreme overload
[NASA-CASE-XAC-00042] c14 N70-34816

LOADING OPERATIONS
Air bearings for near frictionless transfer of loads from one body to another
[NASA-CASE-XMF-01887] c15 N71-10617

LOADS (FORCES)
Device for handling heavy loads by distributing forces
[NASA-CASE-XNP-04969] c11 N69-27466
Two plane balance for simultaneous measurements of multiple forces
[NASA-CASE-XAC-00073] c14 N70-34813
Improving load capacity and fatigue life of rolling element systems in rockets and missiles
[NASA-CASE-XLE-02999] c15 N71-16052
Development of device for transferring load from load cell to bypass mechanism
[NASA-CASE-XMS-06329-1] c15 N71-20441
Valve assembly for controlling simultaneously more than one fluid flow, and having stable qualities under loads
[NASA-CASE-XMS-05890] c09 N71-23191
Solid state force measuring electromechanical transducers made of piezoresistive materials
[NASA-CASE-ERC-10088] c26 N71-25490
Turn on current transient limiter for controlling peak current flow in high capacity load
[NASA-CASE-GSC-10413] c10 N71-26531
Synchronous dc direct-drive system comprising multiple-loop hybrid control system controlling load directly connected to actuator
[NASA-CASE-GSC-10065-1] c10 N71-27136
Force balanced throttle valve for fuel control in rocket engines
[NASA-CASE-NFO-10808] c15 N71-27432
Energy absorption device in high precision gear train for protection against damage to components caused by stop loads
[NASA-CASE-XNP-01848] c15 N71-28959
Air bearing for use in exterior environment for moving heavy loads
[NASA-CASE-WLP-10002] c15 N72-17451
Measuring device for bearing preload using spring washers
[NASA-CASE-MFS-20434] c11 N72-25288
Variable direction force coupler for transmitting force along selectable curve path
[NASA-CASE-MFS-20317] c15 N73-13463
Versatile ergometer with work load control
[NASA-CASE-MFS-21109-1] c05 N73-27941
Three-axis adjustable loading structure
[NASA-CASE-FRC-10051-1] c35 N74-13129
G-load measuring and indicator apparatus --- for aircraft
[NASA-CASE-ARC-10806] c06 N74-27872

- Spring operated accelerator and constant force spring mechanism therefor
[NASA-CASE-ARC-10898-1] c35 N77-18417
- Penetrometer --- for determining load bearing characteristics of inclined surfaces
[NASA-CASE-NPO-11103-1] c35 N77-27367
- Load regulating latch
[NASA-CASE-MSC-19535-1] c37 N77-32499
- LOCATES SYSTEM**
- System for locating lightning strokes by coordinatich of directional antenna signals
[NASA-CASE-KSC-10729-1] c09 N73-32110
- Position determination systems --- using orbital antenna scan of celestial bodies
[NASA-CASE-MSC-12593-1] c17 N76-21250
- LOCKING**
- Releasable coupling device designed to receive and retain matching ends of electrical connectors
[NASA-CASE-XMS-07846-1] c09 N69-21927
- LOCKS (FASTENERS)**
- Ball locking device which releases in response to small forces when subjected to high axial loads
[NASA-CASE-XMP-01371] c15 N70-41829
- Low friction bearing and lock mechanism for two-axis gimbal carrying satellite payload
[NASA-CASE-GSC-10556-1] c31 N71-26537
- Locking device for retaining turbine rotor blades on turbine wheel
[NASA-CASE-XNP-00816] c28 N71-28928
- Longitudinal film gate and lock mechanism for securing film in motion picture cameras under vibration and high acceleration loads
[NASA-CASE-LAR-10686] c14 N71-28935
- Design of quick release locking pin for joining two or more load-carrying structural members
[NASA-CASE-MFS-18495] c15 N72-11385
- Locking mechanism for orthopedic braces
[NASA-CASE-GSC-12082-1] c54 N76-22514
- High temperature penetrator assembly with bayonet plug and ramp-activated lock
[NASA-CASE-MSC-18526-1] c35 N80-19468
- Aircraft canopy lock
[NASA-CASE-FRC-11065-1] c05 N81-24047
- Portable appliance security apparatus
[NASA-CASE-GSC-12399-1] c33 N81-25299
- Locking mechanism for orthopedic braces
[NASA-CASE-GSC-12082-2] c52 N81-25661
- LOCOMOTION**
- Jet shoes for space locomotion
[NASA-CASE-XLA-08491] c05 N69-21380
- Attitude control training device for astronauts permitting friction-free movement with five degrees of freedom
[NASA-CASE-XMS-02977] c11 N71-10746
- Restraint torso for increased mobility and reduced physiological effects while wearing pressurized suits
[NASA-CASE-MSC-12397-1] c05 N72-25119
- Kinesimetric method and apparatus
[NASA-CASE-MSC-18929-1] c54 N81-15699
- LOGARITHMIC RECEIVERS**
- Logarithmic circuit with wide dynamic range
[NASA-CASE-GSC-12145-1] c33 N78-32339
- LOGARITHMS**
- Technique for deriving logarithm of input signal using exponentially varying electric signal inversely
[NASA-CASE-ERC-10267] c09 N72-23173
- LOGIC CIRCUITS**
- Selective gold diffusion on monolithic silicon chips for switching and nonswitching amplifier devices and circuits and linear and digital logic circuits
[NASA-CASE-ERC-10072] c09 N70-11148
- Counter-divisor circuit for accuracy and reliability in binary circuits
[NASA-CASE-XMP-00421] c09 N70-34502
- Binary to binary-coded decimal converter using single set of logic circuits notwithstanding number of shift register decades
[NASA-CASE-XNP-00432] c08 N70-35423
- Conversion system for increasing resolution of analog to digital converters
[NASA-CASE-XAC-00404] c08 N70-40125
- Data processor having multiple sections activated at different times by selective power coupling to sections
[NASA-CASE-XGS-04767] c08 N71-12494
- Binary sequence detector with few memory elements and minimized logic circuit complexity
[NASA-CASE-XNP-05415] c08 N71-12505
- Bistable multivibrator circuits operating at high speed and low power dissipation
[NASA-CASE-XGS-00823] c10 N71-15910
- Logic AND gate for fluid circuits
[NASA-CASE-XLA-07391] c12 N71-17579
- Logic circuit to ripple add and subtract binary counters for spaceborne computers
[NASA-CASE-XGS-04766] c08 N71-18602
- Constructing Exclusive-Or digital logic circuit in single module
[NASA-CASE-XLA-07732] c08 N71-18751
- Stepping motor control apparatus exciting windings in proper time sequence to cause motor to rotate in either direction
[NASA-CASE-GSC-10366-1] c10 N71-18772
- Serial digital decoder design with square circuit matrix and serial memory storage units
[NASA-CASE-NPO-10150] c08 N71-24650
- Binary to decimal decoder logic circuit design with feedback control and display device
[NASA-CASE-XKS-06167] c08 N71-24890
- Design and development of multistage current steering switch with inductively coupled magnetic cores
[NASA-CASE-XNP-08567] c09 N71-26000
- Logic circuit for generating multibit binary code word in parallel
[NASA-CASE-XNP-04623] c10 N71-26103
- Adaptive signal generating system and logic circuits for satellite television systems
[NASA-CASE-GSC-11367] c10 N71-26374
- Transistorized switching logic circuits with tunnel diodes
[NASA-CASE-GSC-10878-1] c10 N72-22236
- Logical function and circuit generator
[NASA-CASE-XLA-05099] c09 N73-13209
- A synchronous binary array divider
[NASA-CASE-ERC-10180-1] c60 N74-20836
- Four phase logic systems --- including integrated microcircuits
[NASA-CASE-MSC-14240-1] c33 N75-14957
- A general logic structure for custom LSI circuits
[NASA-CASE-NPO-14410-1] c33 N79-25314
- Combinational logic for generating gate drive signals for phase control rectifiers
[NASA-CASE-MFS-25208-1] c33 N81-27402
- Interleaving device
[NASA-CASE-GSC-12111-2] c33 N81-29342
- Adaptive control system for line-commutated inverters
[NASA-CASE-MFS-25209-1] c33 N81-31480
- Adaptive reference voltage generator for firing angle control of line-commutated inverters
[NASA-CASE-MFS-25215-1] c33 N81-31481
- LONGITUDINAL CONTROL**
- Three-axis controller operated by hand-wrist motion for yaw, pitch, and roll control
[NASA-CASE-XAC-01404] c05 N70-41581
- Pitch attitude stabilization system utilizing engine pressure ratio feedback signals
[NASA-CASE-LAR-12562-1] c08 N81-26152
- LONGITUDINAL STABILITY**
- An annular wing
[NASA-CASE-FRC-11007-2] c02 N79-24959
- LOOP ANTENNAS**
- Collapsible, space erectable loop antenna system for space vehicle
[NASA-CASE-XMP-00437] c07 N70-40202
- Automatic carrier acquisition system for phase locked loop receiver
[NASA-CASE-NPO-11628-1] c07 N73-30113
- LOOPS**
- Tape cartridge with high capacity storage of endless-loop magnetic tape
[NASA-CASE-XGS-00769] c14 N70-41647
- Endless loop tape transport mechanism for driving and tensioning recording medium in magnetic tape recorder
[NASA-CASE-XGS-01223] c07 N71-10609
- Filter for third order phase locked loops in signal receivers
[NASA-CASE-NPO-11941-1] c10 N73-27171
- High speed shutter --- electrically actuated ribbon loop for shuttering optical or fluid passageways

- [NASA-CASE-ARC-10516-1] c70 N74-21300
Means for accommodating large overstrain in lead wires --- by storing extra length of wire in stretchable loop
- [NASA-CASE-LAR-10168-1] c33 N74-22865
Closed loop spray cooling apparatus
- [NASA-CASE-LEW-11981-2] c34 N79-20336
Pseudonoise code tracking loop
- [NASA-CASE-MSC-18035-1] c32 N81-15179
Pulsed phase locked loop strain monitor
- [NASA-CASE-LAR-12772-1] c33 N81-15195
- LOW ASPECT RATIO**
Aerospace configuration with low and high aspect ratio variability for high and low speed flight
- [NASA-CASE-ILA-00142] c02 N70-33286
Aerodynamic configuration for aircraft capable of high speed flight and low drag for low speed takeoff or landing upon presently existing airfields
- [NASA-CASE-ILA-00806] c02 N70-34858
- LOW COST**
Fabrication of polycrystalline solar cells on low-cost substrates
- [NASA-CASE-GSC-12022-1] c44 N76-28635
Process for utilizing low-cost graphite substrates for polycrystalline solar cells
- [NASA-CASE-GSC-12022-2] c44 N78-24609
- LOW CURRENTS**
Low current linearization of magnetic amplifier for dc transducer
- [NASA-CASE-NPO-14617-1] c33 N81-24338
- LOW DENSITY MATERIALS**
Method and photodetector device for locating abnormal voids in low density materials
- [NASA-CASE-MPS-20044] c14 N71-28993
Intumescent composition, foamed product prepared therewith and process for making same
- [NASA-CASE-ARC-10304-2] c27 N74-27037
Mixing insert for foam dispensing apparatus
- [NASA-CASE-MPS-20607-1] c37 N76-19436
Low density bismaleimide-carbon microballoon composites --- aircraft and submarine compartment safety
- [NASA-CASE-ARC-11040-2] c24 N78-27184
Low density bismaleimide-carbon microballoon composites
- [NASA-CASE-ARC-11040-1] c24 N79-16915
Catalysts for polyimide foams from aromatic isocyanates and aromatic dianhydrides --- flame retardant foams
- [NASA-CASE-ARC-11107-1] c25 N80-16116
- LOW FREQUENCIES**
Determining sway of buildings by low frequency device using pendulum
- [NASA-CASE-IMP-00479] c14 N70-34794
Low-frequency radio navigation system
- [NASA-CASE-NPO-15264-1] c04 N81-22036
- LOW GRAVITY MANUFACTURING**
Method for manufacturing mirrors in zero gravity environment
- [NASA-CASE-MSC-12611-1] c12 N76-15189
- LOW MOLECULAR WEIGHTS**
Process for preparing high molecular weight polyaryloxysilanes from lower molecular weight forams
- [NASA-CASE-IMP-06674] c06 N71-28607
- LOW NOISE**
Low phase noise frequency divider for use with deep space network communication system
- [NASA-CASE-NPO-11569] c10 N73-26229
Reflected-wave maser --- low noise amplifier
- [NASA-CASE-NPO-13490-1] c36 N76-31512
- LOW PASS FILTERS**
Filtering technique based on high-frequency plant modeling for high-gain control
- [NASA-CASE-LAR-12215-1] c08 N79-23697
- LOW PRESSURE**
Flowmeters for sensing low fluid flow rate and pressure for application to respiration rate studies
- [NASA-CASE-FRC-10022] c12 N71-26546
Bakeable McLeod gauge
- [NASA-CASE-IGS-01293-1] c35 N79-33450
- LOW SPEED**
Variable geometry manned orbital vehicle having high aerodynamic efficiency over wide speed range and incorporating auxiliary pivotal wings
- [NASA-CASE-ILA-03691] c31 N71-15674
- Device utilizing RC rate generators for continuous slow speed measurement
- [NASA-CASE-IMP-02966] c10 N71-24863
- LOW TEMPERATURE**
Atomic hydrogen storage method and apparatus
- [NASA-CASE-LEW-12081-3] c28 N81-14103
- LOW TEMPERATURE ENVIRONMENTS**
Flexible, frangible electrochemical cell and package for operation in low temperature environment
- [NASA-CASE-IGS-10010] c03 N72-15986
Low thrust monopropellant engine --- low temperature environments
- [NASA-CASE-GSC-12194-2] c20 N79-15151
Optical crystal temperature gauge with fiber optic connections --- cryogenic systems
- [NASA-CASE-MSC-18627-1] c74 N81-15818
- LOW TEMPERATURE TESTS**
Cryostat for flexure fatigue testing of composite materials
- [NASA-CASE-IMP-02964] c14 N71-17659
Cryostat for use with horizontal fatigue testing machines at low temperatures
- [NASA-CASE-IMP-10968] c14 N71-24234
Heating and cooling system --- for fatigue test specimens
- [NASA-CASE-LAR-12393-1] c39 N80-25693
- LOW THRUST PROPULSION**
Low thrust monopropellant engine --- low temperature environments
- [NASA-CASE-GSC-12194-2] c20 N79-15151
- LOW VACUUM**
Vibration damping system operating in low vacuum environment for spacecraft mechanisms
- [NASA-CASE-XMS-01620] c23 N71-15673
- LOW VOLTAGE**
High speed low level voltage commutating switch
- [NASA-CASE-XAC-00060] c09 N70-39915
Flexible monopole antenna with broad bandwidth and low voltage standing wave ratio
- [NASA-CASE-MSC-12101] c09 N71-18720
Circuit design for failure sensing and protecting low voltage electric generator and power transmission networks
- [NASA-CASE-GSC-10114-1] c10 N71-27366
- LUBRICANTS**
Metallic film diffusion into metal or ceramic surfaces for boundary lubrication in aerospace environments
- [NASA-CASE-XLE-01765] c18 N71-10772
Metallic film diffusion for boundary lubrication in aerospace engineering
- [NASA-CASE-XLE-10337] c15 N71-24046
Fluorinated esters of polycarboxylic acid and lubricating compositions for use at extreme temperature
- [NASA-CASE-MPS-21040-1] c06 N73-30098
Thiophenyl ether disiloxanes and trisiloxanes useful as lubricant fluids
- [NASA-CASE-MPS-22411-1] c37 N74-21058
Journal bearings --- for lubricant films
- [NASA-CASE-LEW-11076-1] c37 N74-21061
Method for milling and drilling glass
- [NASA-CASE-GSC-12636-1] c37 N80-29705
- LUBRICATING OILS**
Fluid seal formed by flexible disk on rotating shaft to retain lubricating oils around shaft
- [NASA-CASE-XLE-05130-2] c15 N71-19570
- LUBRICATION**
Hollow high strength rolling elements for antifriction bearings fabricated from preformed components
- [NASA-CASE-LEW-11026-1] c15 N73-33383
Variable resistance constant tension and lubrication device --- using oil-saturated leather wiper
- [NASA-CASE-KSC-10723-1] c37 N75-13265
Fluid journal bearings
- [NASA-CASE-LEW-11076-4] c37 N76-15461
- LUBRICATION SYSTEMS**
Development of hybrid bearing lubrication system with combination of standard type lubrication and magnetic flux field for earth atmosphere and space environment operation
- [NASA-CASE-IMP-01641] c15 N71-22997
Lubrication for bearings by capillary action from oil reservoir of porous material
- [NASA-CASE-IMP-03972] c15 N71-23048

Journal Bearings
[NASA-CASE-LEW-11076-2] c37 N74-32521

Oil cooling system for a gas turbine engine
[NASA-CASE-LEW-12321-1] c37 N78-10467

LUMINAIRES

Visual target luminaires for retrofire attitude control
[NASA-CASE-XMS-12158-1] c31 N69-27499

Development of ultraviolet resonance lamp with improved transmission of radiation
[NASA-CASE-ARC-10030] c09 N71-12521

Lamp modulator for generating visual indication of presence and magnitude of signal
[NASA-CASE-KSC-10565] c09 N72-25250

Electrodeless lamp circuit driven by induction
[NASA-CASE-MFS-21214-1] c09 N73-30181

Uniform variable light source
[NASA-CASE-NPO-11429-1] c74 N77-21941

LUMINOSITY

Mechanism for measuring nanosecond time differences between luminous events using streak camera
[NASA-CASE-XLA-01987] c23 N71-23976

LUMINOUS INTENSITY

Filter arrangement for controlling light intensity in motion picture camera used in optical pyrometry
[NASA-CASE-XLA-00062] c14 N70-33254

Development of star intensity measuring system which minimizes effects of outside interference
[NASA-CASE-XP-06510] c14 N71-23797

Continuous plasma laser --- method and apparatus for producing intense, coherent, monochromatic light from low temperature plasma
[NASA-CASE-XP-04167-3] c36 N77-19416

Solar cell assembly --- for use under high intensity illumination
[NASA-CASE-LEW-11549-1] c44 N77-19571

Compact, high intensity arc lamp with internal magnetic field producing means
[NASA-CASE-NPO-11510-1] c33 N77-21315

System for the measurement of ultra-low stray light levels --- determining the adequacy of large space telescope systems
[NASA-CASE-MFS-23513-1] c74 N79-11865

LUNAR BASES

Development and characteristics of natural circulation radiator for use with nuclear power plants installed in lunar space stations
[NASA-CASE-XHQ-03673] c33 N71-29046

LUNAR COMMUNICATION

Conversion system for transforming slow scan rate of Apollo TV camera on moon to fast scan of commercial TV
[NASA-CASE-XMS-07168] c07 N71-11300

Three transceiver lunar emergency system to relay voice communication of astronaut
[NASA-CASE-MFS-21042] c07 N72-25171

LUNAR COMPOSITION

Development and characteristics of pentrometer for measuring physical properties of lunar surface
[NASA-CASE-XLA-00934] c14 N71-22765

LUNAR EXPLORATION

Backpack carrier with retractable legs suitable for lunar exploration and convertible to rescue vehicle
[NASA-CASE-LAR-10056] c05 N71-12351

Development and characteristics of pentrometer for measuring physical properties of lunar surface
[NASA-CASE-XLA-00934] c14 N71-22765

Lightweight propulsion unit for movement of personnel and equipment across lunar surface
[NASA-CASE-MFS-20130] c28 N71-27585

Three transceiver lunar emergency system to relay voice communication of astronaut
[NASA-CASE-MFS-21042] c07 N72-25171

LUNAR GRAVITATION

Apparatus for training astronaut crews to perform on simulated lunar surface under conditions of lunar gravity
[NASA-CASE-XMS-04798] c11 N71-21474

LUNAR GRAVITY SIMULATOR

Lunar and planetary gravity simulator to test vehicular response to landing
[NASA-CASE-XLA-00493] c11 N70-34786

LUNAR LANDING

Lunar landing flight research vehicle

[NASA-CASE-XP-00929] c31 N70-34966

LUNAR LOGISTICS

Lightweight propulsion unit for movement of personnel and equipment across lunar surface
[NASA-CASE-MFS-20130] c28 N71-27585

LUNAR ROCKS

Impact bit for cutting, collecting, and storing samples such as lunar rock cuttings
[NASA-CASE-XP-01412] c15 N70-42034

LUNAR SOIL

Development of device for separating, collecting, and viewing soil particles
[NASA-CASE-XP-09770] c15 N71-20440

Device which separates and screens particles of soil samples for vidicon viewing in vacuum and reduced gravity environments
[NASA-CASE-XP-09770-3] c11 N71-27036

Portable penetrometer for analyzing soil characteristics
[NASA-CASE-MFS-20774] c14 N73-19420

Method for obtaining oxygen from lunar or similar soil
[NASA-CASE-MSC-12408-1] c46 N74-13011

LUNAR SURFACE VEHICLES

Resilient vehicle wheel for lunar surface travel
[NASA-CASE-MFS-20400] c31 N71-18611

Resilient wheel design with woven wire tire and abrasive treads for lunar surface vehicles
[NASA-CASE-MFS-13929] c15 N71-27091

LUNGS

Piston device for producing known constant positive pressure within lungs by using thoracic muscles
[NASA-CASE-XMS-01615] c05 N70-41329

M

MACHINE TOOLS

Rotary impact-type rock drill for recovering rock cuttings
[NASA-CASE-XP-07478] c14 N69-21923

Description of protective device for providing safe operating conditions around work piece in machine or metal working tool
[NASA-CASE-XLE-01092] c15 N71-22797

Description of device for aligning stacked sheets of paper for repetitive cutting
[NASA-CASE-XMS-04178] c15 N71-22798

Development and characteristics of frusto-conical die nib for extrusion of refractory metals
[NASA-CASE-XLE-06773] c15 N71-23817

Design and development of layout tool for machine shop use to locate point in precise reference to straight or bowed reference edge
[NASA-CASE-FRC-10005] c15 N71-26145

Optical gauging system for monitoring machine tool alignment
[NASA-CASE-XAC-09489-1] c15 N71-26673

Caterpillar micropositioner for positioning machine tools adjacent to workpiece
[NASA-CASE-GSC-10780-1] c14 N72-16283

Geneva mechanism --- including star wheel and driver
[NASA-CASE-NPO-13281-1] c37 N75-13266

Zero torque gear head wrench
[NASA-CASE-NPO-13059-1] c37 N76-20480

Precision alignment apparatus for cutting a workpiece
[NASA-CASE-LAR-11658-1] c37 N77-14478

Toggle mechanism for pinching metal tubes
[NASA-CASE-GSC-12274-1] c37 N79-28550

Crystal cleaving machine
[NASA-CASE-GSC-12584-1] c76 N80-32246

Method and tool for machining a transverse slot about a bore
[NASA-CASE-LAR-11855-1] c37 N81-14319

Holding fixture for a hot stamping press
[NASA-CASE-GSC-12619-1] c37 N81-16470

MACHINERY

Design of mechanical device for stirring several test tubes simultaneously
[NASA-CASE-XAC-06956] c15 N71-21177

Precipitation detector and mechanism for stopping and restarting machinery at initiation and cessation of rain
[NASA-CASE-XLA-02619] c10 N71-26334

Apparatus for forming drive belts
[NASA-CASE-NPO-13205-1] c31 N74-32917

MACHINING

- Laser machining device with dielectric functioning as beam waveguide for mechanical and medical applications
[NASA-CASE-BQN-10541-2] c15 N71-27135
- Lathe tool and holder combination for machining resin impregnated fiberglass cloth laminates
[NASA-CASE-XLA-10470] c15 N72-21489
- Drilled ball bearing with a one piece anti-tipping cage assembly
[NASA-CASE-LEW-11925-1] c37 N75-31446

MAGNESIUM

- Chemical spot test for identifying magnesium or magnesium alloys used in aerospace applications
[NASA-CASE-LAR-10953-1] c17 N73-27446

MAGNESIUM ALLOYS

- Procedure for bonding polytetrafluoroethylene thermal protective sleeves to magnesium alloy conical shell components with different thermal coefficients
[NASA-CASE-XLA-01262] c15 N71-21404
- Chemical spot test for identifying magnesium or magnesium alloys used in aerospace applications
[NASA-CASE-LAR-10953-1] c17 N73-27446

MAGNESIUM OXIDES

- Method for determining presence and type of OH in MgO
[NASA-CASE-NPO-10774] c06 N72-17095

MAGNET COILS

- Improved alternator with windings of superconducting materials acting as permanent magnet
[NASA-CASE-XLE-02824] c03 N69-39890
- Relay circuit breaker with magnetic latching to provide conductive and nonconductive paths for current devices
[NASA-CASE-MSC-11277] c09 N71-29008

MAGNETIC AMPLIFIERS

- Low current linearization of magnetic amplifier for dc transducer
[NASA-CASE-NPO-14617-1] c33 N81-24338

MAGNETIC CHARGE DENSITY

- Ion engine with magnetic circuit for optimal discharge
[NASA-CASE-XLE-01124] c28 N71-14043

MAGNETIC CIRCUITS

- Ion engine with magnetic circuit for optimal discharge
[NASA-CASE-XLE-01124] c28 N71-14043

MAGNETIC COILS

- Time division multiplexer with magnetic latching relays
[NASA-CASE-XNP-00431] c09 N70-38598
- Linear magnetic braking system with nonuniformly wrapped primary coil producing constant braking force on secondary coil
[NASA-CASE-XLE-05079] c15 N71-17652
- Electroexplosive safe-arm initiator using electric driven electromagnetic coils and magnets to align charge
[NASA-CASE-LAR-10372] c09 N71-18599
- Magnifying image intensifier
[NASA-CASE-GSC-12010-1] c74 N78-18905

MAGNETIC CONTROL

- Magnetically opened diaphragm design with camera shutter and expansion tube applications
[NASA-CASE-XLA-03660] c15 N71-21060
- Magnetically controlled plasma accelerator capable of ignition in low density gaseous environment
[NASA-CASE-XLA-00327] c25 N71-29184
- Axially and radially controllable magnetic bearing
[NASA-CASE-GSC-11551-1] c37 N76-18459
- Magnetic bearing system
[NASA-CASE-GSC-11978-1] c37 N77-17464

MAGNETIC CORES

- Variable frequency magnetic coupled multivibrator with temperature compensated frequency control circuit
[NASA-CASE-XGS-00458] c09 N70-38604
- Variable frequency magnetic coupled multivibrator with output signal of constant amplitude and waveform
[NASA-CASE-XGS-00131] c09 N70-38995
- Electronic counter circuit utilizing magnetic core and low power consumption
[NASA-CASE-XNP-08836] c09 N71-12515
- Pulsed magnetic core memory element with blocking oscillator feedback for interrogation

- without loss of digital information
[NASA-CASE-XGS-03303] c08 N71-18595
 - Describing magnetic core current switching device for steering bipolar current pulses to memory units
[NASA-CASE-NPO-10201] c08 N71-18694
 - Reliable magnetic core circuit apparatus with application in selection matrices for digital memories
[NASA-CASE-XNP-01318] c10 N71-23033
 - Magnetic current regulator for saturable core transformer
[NASA-CASE-ERC-10075] c09 N71-24800
 - Power switch with transfluxor type magnetic core
[NASA-CASE-NPO-10242] c09 N71-24803
 - Unsaturating magnetic core transformer design with warning signal for electrical power processing equipment
[NASA-CASE-ERC-10125] c09 N71-24893
 - Temperature sensitive magnetometer with pulsating thermally cycled magnetic core
[NASA-CASE-XAC-03740] c14 N71-26135
 - Digital magnetic core memory with sensing amplifier circuits
[NASA-CASE-XNP-01012] c08 N71-28925
 - Saturable magnetic core and signal detection for indicating impending saturation
[NASA-CASE-ERC-10089] c23 N72-17747
 - Commutator for steering precisely controlled bidirectional currents through numerous loads by use of magnetic core shift registers
[NASA-CASE-NPO-10743] c08 N72-21199
 - Banded transformer cores
[NASA-CASE-NPO-11966-1] c33 N74-17928
- MAGNETIC DIPOLES**
- Torque meter for determining magnitude of torque generated by interaction of magnetic dipole between test specimen and ambient magnetic field
[NASA-CASE-XGS-01013] c14 N71-23725
- MAGNETIC DISKS**
- Device for removing plastic dust cover from digital computer disk packs for inspection and cleaning
[NASA-CASE-LAR-10590-1] c15 N70-26819
- MAGNETIC FIELD CONFIGURATIONS**
- Mass spectrometer with magnetic pole pieces providing the magnetic fields for both the magnetic sector and an ion-type vacuum pump
[NASA-CASE-NPO-13663-1] c35 N77-14406
 - Magnifying image intensifier
[NASA-CASE-GSC-12010-1] c74 N78-18905
 - Linear magnetic bearings --- active magnetic suspension of armatures
[NASA-CASE-GSC-12582-1] c37 N81-16469
- MAGNETIC FIELDS**
- Magnetically diffused radial electric arc heater
[NASA-CASE-XLA-00330] c33 N70-34540
 - Method and apparatus for communicating through ionized layer of gases surrounding spacecraft during reentry into planetary atmospheres
[NASA-CASE-XLA-01127] c07 N70-41372
 - Venting device for liquid propellant storage tank using magnetic field to separate liquid and gaseous phases
[NASA-CASE-XLE-01449] c15 N70-41646
 - Ion engine with magnetic circuit for optimal discharge
[NASA-CASE-XLE-01124] c28 N71-14043
 - Development of wide range linear fluxgate magnetometer
[NASA-CASE-XGS-01587] c14 N71-15962
 - Magnetic element position sensing device, using misaligned electromagnets
[NASA-CASE-XGS-07514] c23 N71-16099
 - Development of non-magnetic indexing device for orienting magnetic flux sensing instrument in magnetic field without generation of detrimental magnetic fields
[NASA-CASE-XGS-02422] c15 N71-21529
 - Regation of magnetic fields produced by thin waferlike circuit elements in space vehicles
[NASA-CASE-XGS-03390] c03 N71-23187
 - Torque meter for determining magnitude of torque generated by interaction of magnetic dipole between test specimen and ambient magnetic field
[NASA-CASE-XGS-01013] c14 N71-23725
 - Fluxgate magnetometer for measuring magnetic field along two axes using one sensor
[NASA-CASE-GSC-10441-1] c14 N71-27325

- Segmented superconducting magnet producing staggered magnetic field and suitable for broadband traveling wave masers
[NASA-CASE-XGS-10518] c16 N71-28554
- Magnetic method for detection of aircraft position relative to runway
[NASA-CASE-ABC-10179-1] c21 N72-22619
- Radial magnetic field for ion thruster
[NASA-CASE-LEW-10770-1] c28 N72-22770
- Automatic shunting of ion thruster magnetic field when thruster is not operating
[NASA-CASE-LEW-10835-1] c28 N72-22771
- Apparatus for determining distance to lighting strokes from single station by magnetic and electric field sensing antennas
[NASA-CASE-KSC-10698] c07 N73-20175
- Superconducting magnetic field trapping device for producing magnetic field in air
[NASA-CASE-XNP-01185] c26 N73-28710
- Electron beam controller --- using magnetic field to refocus spent electron beam in microwave oscillator tube
[NASA-CASE-LEW-11617-1] c33 N74-10195
- Magnetometer using superconducting rotating body
[NASA-CASE-NPO-13388-1] c35 N76-16390
- Compact, high intensity arc lamp with internal magnetic field producing means
[NASA-CASE-NPO-11510-1] c33 N77-21315
- Magnetic heat pumping
[NASA-CASE-LEW-12508-1] c34 N78-17335
- Atomic hydrogen storage --- cryotrapping and magnetic field strength
[NASA-CASE-LEW-12081-2] c28 N80-20402
- Atomic hydrogen storage method and apparatus
[NASA-CASE-LEW-12081-3] c28 N81-14103
- MAGNETIC FILMS**
Manganese bismuth films with narrow transfer characteristics for Curie-point switching
[NASA-CASE-NPO-11336-1] c76 N79-16678
- MAGNETIC FLUX**
Excitation and detection circuitry for flux responsive magnetic head
[NASA-CASE-XNP-04183] c09 N69-24329
- Cryogenic flux-gated magnetometer using superconductors
[NASA-CASE-XAC-02407] c14 N69-27423
- Flux gate magnetometer with toroidal gating coil and solenoidal output coil for signal modulation or amplification
[NASA-CASE-XGS-01881] c09 N70-40123
- Development of hybrid bearing lubrication system with combination of standard type lubrication and magnetic flux field for earth atmosphere and space environment operation
[NASA-CASE-XNP-01641] c15 N71-22997
- Magnetic current regulator for saturable core transformer
[NASA-CASE-ERC-10075] c09 N71-24800
- Magnetic flux pump for changing intensity of magnetic fields
[NASA-CASE-XNP-01187] c15 N73-28516
- Method for increasing intensity of magnetic field by transferring flux
[NASA-CASE-XNP-01188] c15 N73-32361
- Magnetic bearing --- for supplying magnetic fluxes
[NASA-CASE-GSC-11079-1] c37 N75-18574
- A linear magnetic motor/generator --- to generate electric energy using magnetic flux for spacecraft's power supply
[NASA-CASE-GSC-12518-1] c33 N80-19424
- Linear magnetic bearing
[NASA-CASE-GSC-12517-1] c33 N81-22279
- MAGNETIC FORMING**
Portable magnetomotive hammer for metal working
[NASA-CASE-XNP-03793] c15 N71-24833
- Method and apparatus for portable high precision magnetomotive bulging, constricting, and joining of large diameter metal tubes
[NASA-CASE-XNP-05114-3] c15 N71-24665
- MAGNETIC INDUCTION**
Continuous operation, single phased, induction plasma accelerator producing supersonic speeds
[NASA-CASE-XLA-01354] c25 N70-36946
- Automatic power supply circuit design for driving inductive loads and minimizing power consumption including solenoid example
[NASA-CASE-NPO-10716] c09 N71-24892
- Double-induction variable speed system for constant-frequency electrical power generation
[NASA-CASE-ERC-10065] c09 N71-27364
- High speed shutter --- electrically actuated ribbon loop for shuttering optical or fluid passageways
[NASA-CASE-ABC-10516-1] c70 N74-21300
- MAGNETIC LENSES**
Quadrupole mass spectrometer using noise spectrum for ion separation and identification
[NASA-CASE-XNP-04231] c14 N73-32325
- MAGNETIC MATERIALS**
Low density and low viscosity magnetic propellant for use under zero gravity conditions
[NASA-CASE-XLE-01512] c12 N70-40124
- MAGNETIC MEASUREMENT**
Cryogenic flux-gated magnetometer using superconductors
[NASA-CASE-XAC-02407] c14 N69-27423
- Development of wide range linear fluxgate magnetometer
[NASA-CASE-XGS-01587] c14 N71-15962
- Active RC filter networks and amplifiers for deep space magnetic field measurement
[NASA-CASE-XAC-05462-2] c10 N72-17171
- Magnetometer using superconducting rotating body
[NASA-CASE-NPO-13388-1] c35 N76-16390
- MAGNETIC POLES**
Design of magnetohydrodynamic induction machine with end poles which produce compensating magnetic fields
[NASA-CASE-XNP-07481] c25 N69-21929
- Mass spectrometer with magnetic pole pieces providing the magnetic fields for both the magnetic sector and an ion-type vacuum pump
[NASA-CASE-NPO-13663-1] c35 N77-14406
- MAGNETIC PUMPING**
Magnetic flux pump for changing intensity of magnetic fields
[NASA-CASE-XNP-01187] c15 N73-28516
- Method for increasing intensity of magnetic field by transferring flux
[NASA-CASE-XNP-01188] c15 N73-32361
- Magnetocaloric pump --- for cryogenic fluids
[NASA-CASE-LEW-11672-1] c37 N74-27904
- MAGNETIC RECORDING**
Development of data storage system for storing digital data in high density format on magnetic tape
[NASA-CASE-XNP-02778] c08 N71-22710
- Magnetic recording head composed of ferrite core coated with thin film of aluminum-iron-silicon alloy
[NASA-CASE-GSC-10097-1] c08 N71-27210
- Thermomagnetic recording and magnetic-optic playback system
[NASA-CASE-NPO-10872-1] c35 N79-16246
- Manganese bismuth films with narrow transfer characteristics for Curie-point switching
[NASA-CASE-NPO-11336-1] c76 N79-16678
- MAGNETIC SIGNALS**
Plural recorder system which limits signal recording to signals of sufficient interest
[NASA-CASE-XMS-06949] c09 N69-21467
- MAGNETIC STORAGE**
Nondestructive interrogating and state changing circuit for binary magnetic storage elements
[NASA-CASE-XGS-00174] c08 N70-34743
- Magnetic matrix memory system for nondestructive reading of information contained in matrix
[NASA-CASE-XNP-05835] c08 N71-12504
- Pulse duration control device for driving slow response time loads in selected sequence including switching and delay circuits and magnetic storage
[NASA-CASE-XGS-04224] c10 N71-26418
- Redundant memory for enhanced reliability of digital data processing system
[NASA-CASE-GSC-10564] c10 N71-29135
- Momentum wheel design for spacecraft attitude control and magnetic drum and head system for data storage
[NASA-CASE-NPO-11481] c21 N73-13644
- Atomic hydrogen storage method and apparatus
[NASA-CASE-LEW-12081-1] c28 N78-24365
- MAGNETIC SUSPENSION**
Magnetic suspension and pointing system
[NASA-CASE-LAB-11889-2] c37 N78-27424

- Magnetic suspension and pointing system --- on a carrier vehicle
[NASA-CASE-LAR-11889-1] c35 N79-26372
- Containerless melting and rapid solidification apparatus and method
[NASA-CASE-MPS-25305-1] c35 N81-16427
- Linear magnetic bearings --- active magnetic suspension of armatures
[NASA-CASE-GSC-12582-1] c37 N81-16469
- MAGNETIC SWITCHING**
Power switch with transfluxor type magnetic core
[NASA-CASE-NPO-10242] c09 N71-24603
- Design and development of multistage current steering switch with inductively coupled magnetic cores
[NASA-CASE-XNP-08567] c09 N71-26000
- MAGNETIC TAPE TRANSPORTS**
Reel safety brake
[NASA-CASE-GSC-11960-1] c37 N77-14479
- MAGNETIC TAPES**
Tape cartridge with high capacity storage of endless-loop magnetic tape
[NASA-CASE-IGS-00769] c14 N70-41647
- Endless loop tape transport mechanism for driving and tensioning recording medium in magnetic tape recorder
[NASA-CASE-IGS-01223] c07 N71-10609
- Development of low friction magnetic recording tape
[NASA-CASE-XGS-00373] c23 N71-15978
- System for recording and reproducing PCM data from data stored on magnetic tape
[NASA-CASE-XGS-01021] c08 N71-21042
- Kinetic and static friction force measurement between magnetic tape and magnetic head surfaces
[NASA-CASE-XNP-08680] c14 N71-22995
- Technique for recovery of voice data from heat damaged magnetic tape
[NASA-CASE-MSC-14219-1] c32 N74-27612
- Automatic character skew and spacing checking network --- of digital tape drive systems
[NASA-CASE-GSC-11925-1] c33 N76-18353
- MAGNETIC TRANSDUCERS**
Magnetometer with a miniature transducer and automatic scanning
[NASA-CASE-LAR-11617-2] c35 N78-32397
- MAGNETIZATION**
Permanently magnetized ion engine casing construction for use in spacecraft propulsion systems
[NASA-CASE-XNP-06942] c28 N71-23293
- MAGNETO-OPTICS**
Thermomagnetic recording and magneto-optic playback system having constant intensity laser beam control
[NASA-CASE-NPO-11317-2] c36 N74-13205
- MAGNETOHYDRODYNAMIC FLOW**
Improving performance of magnetoplasma dynamic arc rocket engine
[NASA-CASE-LEW-11180-1] c25 N73-25760
- MAGNETOHYDRODYNAMIC GENERATORS**
Design of magnetohydrodynamic induction machine with end poles which produce compensating magnetic fields
[NASA-CASE-XNP-07481] c25 N69-21929
- Magnetohydrodynamic generator for mixing nonconductive gas and liquid metal mist to form slugs
[NASA-CASE-XLE-02083] c03 N69-39983
- Thermoelectric power conversion by liquid metal flowing through magnetic field
[NASA-CASE-XNP-00644] c03 N70-36803
- Crossed field MHD plasma generator-accelerator
[NASA-CASE-XLA-03374] c25 N71-15562
- Solar driven liquid metal MHD power generator
[NASA-CASE-LAR-12495-1] c44 N81-32609
- MAGNETOMETERS**
Nonmagnetic thermal motor for magnetometer movement
[NASA-CASE-XAR-03786] c09 N69-21313
- Cryogenic flux-gated magnetometer using superconductors
[NASA-CASE-XAC-02407] c14 N69-27423
- Flux gate magnetometer with toroidal gating coil and solenoidal output coil for signal modulation or amplification
[NASA-CASE-IGS-01881] c09 N70-40123
- Development of wide range linear fluxgate magnetometer
[NASA-CASE-XGS-01587] c14 N71-15962
- Design and development of optically pumped resonance magnetometer for determining vectoral components in spatial coordinate system
[NASA-CASE-IGS-04879] c14 N71-20428
- Temperature sensitive magnetometer with pulsating thermally cycled magnetic core
[NASA-CASE-XAC-03740] c14 N71-26135
- Fluxgate magnetometer for measuring magnetic field along two axes using one sensor
[NASA-CASE-GSC-10441-1] c14 N71-27325
- Hall effect magnetometer
[NASA-CASE-LEW-11632-2] c35 N75-13213
- Magnetometer using superconducting rotating body
[NASA-CASE-NPO-13388-1] c35 N76-16390
- Magnetic heading reference
[NASA-CASE-LAR-11387-1] c04 N76-20114
- Magnetic heading reference
[NASA-CASE-LAR-11387-2] c04 N77-19056
- Magnetometer with a miniature transducer and automatic scanning
[NASA-CASE-LAR-11617-2] c35 N78-32397
- A low energy electron magnetometer
[NASA-CASE-LAR-12706-1] c35 N81-19428
- MAGNETRONS**
Tuning arrangement for frequency control of magnetron-type electron discharge device
[NASA-CASE-XNP-09771] c09 N71-24841
- MAGNETS**
Magnetic electrical connectors for biomedical percutaneous implants
[NASA-CASE-KSC-11030-1] c52 N77-25772
- Miniature cyclotron resonance ion source using small permanent magnet
[NASA-CASE-NPO-14324-1] c72 N80-27163
- Linear magnetic bearing
[NASA-CASE-GSC-12517-1] c33 N81-22279
- MAGNIFICATION**
Camera adapter design for image magnification including lens and illuminator
[NASA-CASE-XMF-03844-1] c14 N71-26474
- Passive type, magnifying scratch gage, force transducer
[NASA-CASE-LAR-10496-1] c14 N72-22437
- Magnifying image intensifier
[NASA-CASE-GSC-12010-1] c74 N78-18905
- MAGNITUDE**
Torquemeter for determining magnitude of torque generated by interaction of magnetic dipole between test specimen and ambient magnetic field
[NASA-CASE-XGS-01013] c14 N71-23725
- MAINTENANCE**
Self testing and repairing computer comprising control and diagnostic unit and rollback points for error correction
[NASA-CASE-NPO-10567] c08 N71-24633
- Development of process for bonding resinous body in cavities of honeycomb structures
[NASA-CASE-MSC-12357] c15 N73-12489
- Method of repairing discontinuity in fiberglass structures
[NASA-CASE-LAR-10416-1] c24 N74-30001
- Computer circuit card puller
[NASA-CASE-FRC-11042-1] c37 N80-20589
- System for refurbishing and processing parachutes
[NASA-CASE-KSC-11042-1] c02 N81-14967
- System and method for refurbishing and processing parachutes --- monorial conveyor system
[NASA-CASE-KSC-11042-2] c02 N81-26073
- Method of repairing surface damage to porous refractory substrates --- shuttle orbiter tiles
[NASA-CASE-MSC-18736-1] c27 N81-29231
- MAINFUNCTIONS**
Aircraft instrument for indicating malfunctions during takeoff
[NASA-CASE-XLA-00100] c14 N70-36807
- MANDRELS**
Mandrel for shaping solid propellant rocket fuel into engine casing
[NASA-CASE-XLA-00304] c27 N70-34783
- Rotating, multisided mandrel for fabricating gored inflatable spacecraft
[NASA-CASE-XLA-04143] c15 N71-17687
- Method of making solid propellant rocket motor having reliable high altitude capabilities, long shelf life, and capable of firing with nozzle closure with foamed plastic permanent mandrel

- [NASA-CASE-XLA-04126] c28 N71-26779
- MANGANESE**
- Manganese bismuth films with narrow transfer characteristics for Curie-point switching
[NASA-CASE-NPO-11336-1] c76 N79-16678
- MANIPOLDS**
- Injector manifold assembly for bipropellant rocket engines providing for fuel propellant to serve as coolant
[NASA-CASE-XMP-00148] c28 N70-38710
- Collimated beam manifold and method for using the same --- laser beams
[NASA-CASE-MPS-25312-1] c74 N80-34251
- MANIPULATORS**
- Manipulator for remote handling in zero gravity environment
[NASA-CASE-MPS-14405] c15 N72-28495
- Orthotic arm joint --- for use in mechanical arms
[NASA-CASE-MPS-21611-1] c54 N75-12616
- Variable ratio mixed-mode bilateral master-slave control system for shuttle remote manipulator system
[NASA-CASE-MSC-14245-1] c18 N75-27041
- Cooperative multiaxis sensor for teleoperation of article manipulating apparatus
[NASA-CASE-NPO-13386-1] c54 N75-27758
- Remotely operable articulated manipulator
[NASA-CASE-MPS-22707-1] c37 N76-15457
- Remote manipulator system
[NASA-CASE-MPS-22022-1] c37 N76-15460
- Anthropomorphic master/slave manipulator system
[NASA-CASE-ARC-10756-1] c54 N77-32721
- Wrist joint assembly
[NASA-CASE-MPS-23311-1] c54 N78-17676
- Terminal guidance sensor system
[NASA-CASE-NPO-14521-1] c54 N79-20746
- Compact artificial hand
[NASA-CASE-NPO-13906-1] c54 N79-24652
- Controller arm for a remotely related slave arm
[NASA-CASE-ARC-11052-1] c37 N79-28551
- Apparatus for sequentially transporting containers
[NASA-CASE-MPS-23846] c37 N80-29704
- Device for coupling a first vehicle to a second vehicle
[NASA-CASE-GSC-12429-1] c37 N81-14320
- Tactile sensing system --- manipulator controllers
[NASA-CASE-NPO-15094-1] c33 N81-16386
- Pneumatic inflatable end effector
[NASA-CASE-MPS-23696-1] c54 N81-26718
- Terminal guidance sensor system --- space shuttle coupling to orbiting satellites
[NASA-CASE-NPO-14521-1] c37 N81-27519
- MANNED ORBITAL LABORATORIES**
- Artificial gravity system for simulating self-locomotion capability of astronauts in rotating environments
[NASA-CASE-XLA-03127] c11 N71-10776
- MANNED ORBITAL RESEARCH LABORATORIES**
- Manned space station collapsible for launching and self-erectable in orbit
[NASA-CASE-XLA-00678] c31 N70-34296
- Radial module manned space station with artificial gravity environment
[NASA-CASE-XMS-01906] c31 N70-41373
- MANNED SPACE FLIGHT**
- Three-port transfer valve with one port open continuously suitable for manned space flight
[NASA-CASE-XAC-01158] c15 N71-23051
- Device for removing air from water for use in life support systems in manned space flight
[NASA-CASE-XLA-8914] c15 N73-12492
- MANNED SPACECRAFT**
- Manned space capsule configuration for orbital flight and atmospheric reentry
[NASA-CASE-XLA-00149] c31 N70-37538
- Delta winged, manned reentry vehicle capable of horizontal glide landing at low speeds
[NASA-CASE-XLA-00241] c31 N70-37586
- Parachute system for lowering manned spacecraft from post-reentry to ocean landing
[NASA-CASE-XLA-00195] c02 N70-38009
- Design and configuration of manned space capsule
[NASA-CASE-XLA-01332] c31 N71-15664
- Development of method for producing artificial gravity in manned spacecraft
[NASA-CASE-XNP-02595] c31 N71-21681
- Chlorine generator for purifying water in life support systems of manned spacecraft
[NASA-CASE-XLA-08913] c14 N71-28933
- Collapsible couch system for manned space vehicles
[NASA-CASE-HSC-13140] c05 N72-11085
- Spacecraft with artificial gravity and earthlike atmosphere
[NASA-CASE-LZW-11101-1] c31 N73-32750
- MANOMETERS**
- Magnetically centered liquid column float
[NASA-CASE-XAC-00030] c14 N70-34820
- Absolute pressure measuring device for measuring gas density level in high vacuum range
[NASA-CASE-LAR-10000] c14 N73-30394
- MANUAL CONTROL**
- Multiple circuit switch apparatus requiring minimum hand and eye movement by operator
[NASA-CASE-XAC-03777] c10 N71-15909
- Manual control mechanism for adjusting control rod to null position
[NASA-CASE-XLA-01808] c15 N71-20740
- Manually activated heat pump for mechanically converting human operator output into heat energy
[NASA-CASE-NPO-10677] c05 N72-11084
- Development of flight simulator system to show position of joystick displacement
[NASA-CASE-NFO-11497] c08 N73-25206
- Solid state controller three axes controller
[NASA-CASE-MSC-12394-1] c08 N74-10942
- G-load measuring and indicator apparatus
[NASA-CASE-ARC-10806-1] c35 N75-29381
- MANUFACTURING**
- Selective gold diffusion on monolithic silicon chips for switching and nonswitching amplifier devices and circuits and linear and digital logic circuits
[NASA-CASE-EBC-10072] c09 N70-11148
- Standard coupling design for mass production
[NASA-CASE-XMS-02532] c15 N70-41808
- Method for making screen with unlimited fineness of mesh and screen thickness
[NASA-CASE-XLE-00953] c15 N71-15966
- Describing apparatus for manufacturing operations in low and zero gravity environments of orbital space flight
[NASA-CASE-MPS-20410] c15 N71-19214
- Manufacture of fluid containers from fused coated polyester sheets having resealable septum
[NASA-CASE-NFO-10123] c15 N71-24835
- Method of making solid propellant rocket motor having reliable high altitude capabilities, long shelf life, and capable of firing with nozzle closure with foamed plastic permanent mandrel
[NASA-CASE-XLA-04126] c28 N71-26779
- Shielded flat conductor cable fabricated by electroless and electrolytic plating
[NASA-CASE-MPS-13687] c09 N71-28691
- Production method for manufacturing porous tungsten bodies from tungsten powder particles
[NASA-CASE-XNP-04339] c17 N71-29137
- Method of making porous conductive supports for electrodes --- by electroforming and stacking nickel foils
[NASA-CASE-GSC-11367-1] c44 N74-19692
- Apparatus for forming drive belts
[NASA-CASE-NPO-13205-1] c31 N74-32917
- Bonding method in the manufacture of continuous regression rate sensor devices
[NASA-CASE-LAR-10337-1] c24 N75-30260
- Process for fabricating SiC semiconductor devices
[NASA-CASE-LZW-12094-1] c76 N76-25049
- Solar hydrogen generator
[NASA-CASE-LAR-11361-1] c44 N77-22607
- Method of forming shrink-fit compression seal
[NASA-CASE-LAR-11563-1] c37 N77-23482
- Method for making a hot wire anemometer and product thereof
[NASA-CASE-ARC-10900-1] c35 N77-24454
- Aluminum or copper substrate panel for selective absorption of solar energy
[NASA-CASE-MPS-23518-3] c44 N80-16452
- Inorganic spark chamber frame and method of making the same
[NASA-CASE-GSC-12354-1] c35 N80-20565
- Polymeric compositions and their method of manufacture --- forming filled polymer systems using cryogenics
[NASA-CASE-NPO-10424-1] c27 N81-24258
- MAPPING**
- Design and development of random function tracer

- for obtaining coordinates of points on contour maps
[NASA-CASE-XLA-01401] c15 N71-21179
Spacecraft transponder and ground station radar system for mapping planetary surfaces
[NASA-CASE-NPO-11001] c67 N72-21118
Seismic vibration source
[NASA-CASE-NPO-14112-1] c46 N79-22679
- MAPS**
Orbital and entry tracking accessory for globes --- to provide range requirements for reentry vehicles to any landing site
[NASA-CASE-LAR-10626-1] c19 N74-21015
Optical process for producing classification maps from multispectral data
[NASA-CASE-MSC-14472-1] c43 N77-10584
- MASERS**
Segmented superconducting magnet producing staggered magnetic field and suitable for broadband traveling wave masers
[NASA-CASE-XGS-10518] c16 N71-28554
Traveling wave maser for operation in 7 to 20 GHz frequency range
[NASA-CASE-NPO-11437] c16 N72-28521
Reflected-wave maser --- low noise amplifier
[NASA-CASE-NPO-13490-1] c36 N76-31512
Multistation refrigeration system
[NASA-CASE-NPO-13839-1] c31 N78-25256
External bulb variable volume maser
[NASA-CASE-GSC-12334-1] c36 N79-14362
Dielectric-loaded waveguide circulator for cryogenically cooled and cascaded maser waveguide structures
[NASA-CASE-NPO-14254-1] c36 N80-18372
Precise RF timing signal distribution to remote stations --- fiber optics
[NASA-CASE-NPO-14749-1] c32 N81-14186
Maser amplifier slow wave structure --- detecting weak signals from spacecraft
[NASA-CASE-NPO-15211-1] c36 N81-24425
Resonant isolator for maser amplifier
[NASA-CASE-NPO-15201-1] c36 N81-24426
- MASKING**
Reusable masking boot for chemical machining operations
[NASA-CASE-XNP-02092] c15 N70-42033
Composition and process for improving definition of resin masks used in chemical etching
[NASA-CASE-XGS-04993] c14 N71-17574
- MASS**
Apparatus for measuring human body mass in zero or reduced gravity environment
[NASA-CASE-XMS-03371] c05 N70-42000
Tuned damped vibration absorber for mass vibrating in more than one degree of freedom for use with wind tunnel models
[NASA-CASE-LAR-10083-1] c15 N71-27006
Fluid mass sensor for a zero gravity environment
[NASA-CASE-MSC-14653-1] c35 N77-19385
- MASS BALANCE**
Two plane balance for simultaneous measurements of multiple forces
[NASA-CASE-XAC-00073] c14 N70-34813
Control system for pressure balance device used in calibrating pressure gages
[NASA-CASE-XNP-04134] c14 N71-23755
- MASS DISTRIBUTION**
Electronic recording system for spatial mass distribution of liquid rocket propellant droplets or vapors ejected from high velocity nozzles
[NASA-CASE-NPO-10185] c10 N71-26339
- MASS FLOW**
Rocket engine injector orifice to accommodate changes in density, velocity, and pressure, thereby maintaining constant mass flow rate of propellant into rocket combustion chamber
[NASA-CASE-XLE-03157] c28 N71-24736
Mass flow meter containing beta source for measuring nonpolar liquid flow
[NASA-CASE-MFS-20485] c14 N72-11365
Generation of high temperature, high mass flow, and high Reynolds number air at hypersonic speeds
[NASA-CASE-LAR-10578-1] c12 N73-25262
- MASS SPECTROMETERS**
Analytical photoionization mass spectrometer with argon gas filter between light source and monochromator
[NASA-CASE-LAR-10180-1] c06 N71-13461
Design and characteristics of time of flight mass spectrometer to measure or analyze gases at low pressures and time of flight of single gas molecule
[NASA-CASE-XNP-01056] c14 N71-23041
Ion microprobe mass spectrometer with cooled electrode target for analyzing traces of fluids
[NASA-CASE-ERC-10014] c14 N71-28863
Test chambers with orifice and helium mass spectrometer for detecting leak rate of encapsulated semiconductor devices
[NASA-CASE-ERC-10150] c14 N71-28992
Apparatus for analyzing gas samples in containers including vacuum chamber, mass spectrometer, and gas chromatography
[NASA-CASE-GSC-10903-1] c14 N73-12444
Quadrupole mass spectrometer using noise spectrum for ion separation and identification
[NASA-CASE-XNP-04231] c14 N73-32325
Fast scan control for deflection type mass spectrometers
[NASA-CASE-LAR-11428-1] c35 N74-34857
Mass spectrometer with magnetic pole pieces providing the magnetic fields for both the magnetic sector and an ion-type vacuum pump
[NASA-CASE-NPO-13663-1] c35 N77-14406
Method for fabricating a mass spectrometer inlet leak
[NASA-CASE-GSC-12077-1] c35 N77-24455
Dual acting slit control mechanism
[NASA-CASE-LAR-11370-1] c35 N80-28686
- MASS SPECTROSCOPY**
Moving particle composition analyzer
[NASA-CASE-GSC-11889-1] c35 N76-16393
Fluid sampling device
[NASA-CASE-GSC-12143-1] c35 N77-32456
- MATERIAL ABSORPTION**
Describing sorption vacuum trap having housing with group of reentrant wall portions projecting into internal gas-pervious container filled with gas and vapor sorbent material
[NASA-CASE-XER-09519] c14 N71-18483
- MATERIALS HANDLING**
Two component valve assembly for cryogenic liquid transfer regulation
[NASA-CASE-XLE-00397] c15 N70-36492
Catalyst bed element removing tool
[NASA-CASE-XFR-00811] c15 N70-36901
Air bearings for near frictionless transfer of loads from one body to another
[NASA-CASE-XNP-01887] c15 N71-10617
Quick-release coupling for fueling rocket vehicles with cryogenic propellants
[NASA-CASE-XKS-01985] c15 N71-10782
Method and apparatus for removing plastic insulation from wire using cryogenic equipment
[NASA-CASE-MFS-10340] c15 N71-17628
Fluid transferring system design for purging toxic, corrosive, or noxious fluids and fumes from materials handling equipment for cleansing and accident prevention
[NASA-CASE-XMS-01905] c12 N71-21089
Description of method for making homogeneous foamed materials in weightless environment using materials having different physical properties
[NASA-CASE-XNP-09902] c15 N72-11387
Design and characteristics of mechanically extended and telescoping boom on crane assembly
[NASA-CASE-NPO-11118] c03 N72-25021
Development of ultrasonic radiation equipment for removing material from host surface and vacuum apparatus for recovery of material
[NASA-CASE-NPO-11213] c15 N73-20514
Development and characteristics of system for skin packaging articles using thermoplastic film heating and vacuum operated equipment
[NASA-CASE-MFS-20855] c15 N73-27405
Apparatus for inserting and removing specimens from high temperature vacuum furnaces
[NASA-CASE-LAR-10841-1] c31 N74-27900
Deployable flexible tunnel
[NASA-CASE-MFS-22636-1] c37 N76-22540
Liquid immersion apparatus for minute articles
[NASA-CASE-MFS-25363-1] c31 N80-32585
- MATERIALS RECOVERY**
Automated system for identifying traces of

- organic chemical compounds in aqueous solutions
[NASA-CASE-NPO-13063-1] c25 N76-18245
- Process for the leaching of AP from propellant
[NASA-CASE-NPO-14109-1] c28 N80-23471
- Recovery of aluminum from composite propellants
[NASA-CASE-NPO-14110-1] c28 N81-15119
- MATERIALS SCIENCE**
- Flammability test chamber for testing materials in certain predetermined environments
[NASA-CASE-KSC-10126] c11 N71-24985
- Device for measuring thermoelectric properties of materials under high pressure
[NASA-CASE-NPO-11749] c14 N73-28486
- MATERIALS TESTS**
- Development of equipment for measuring thermal shock resistance of thin discs of material
[NASA-CASE-XLE-02024] c14 N71-22964
- Multisample test chamber for exposing materials to X rays, temperature change, and gaseous conditions and determination of material effects
[NASA-CASE-XMS-02930] c11 N71-23042
- Automated ball rebound resilience test equipment for determining viscoelastic properties of polymers
[NASA-CASE-XLA-08254] c14 N71-26161
- Hermetic sealing device for ends of tubular bodies during materials testing operations
[NASA-CASE-NPO-10431] c15 N71-29132
- Development of apparatus for testing burning rate and flammability of materials
[NASA-CASE-XMS-09690] c33 N72-25913
- Multiaxial vibration device for making vibration tests along orthogonal axes of test specimen
[NASA-CASE-MFS-20242] c14 N73-19421
- Material testing system with load sensor for applying and measuring cyclic tensile and compressive loads to test specimens
[NASA-CASE-MFS-20673] c14 N73-20476
- MATHEMATICAL LOGIC**
- Logical function and circuit generator
[NASA-CASE-XLA-05099] c09 N73-13209
- MATRICES (CIRCUITS)**
- Fabrication methods for matrices of solar cell submodules
[NASA-CASE-XNP-05821] c03 N71-11056
- Magnetic matrix memory system for nondestructive reading of information contained in matrix
[NASA-CASE-XMF-05835] c08 N71-12504
- Conductor for connecting parallel cells into submodules in series to form solar cell matrix
[NASA-CASE-NPO-10821] c03 N71-19545
- Reliable magnetic core circuit apparatus with application in selection matrices for digital memories
[NASA-CASE-XNP-01318] c10 N71-23033
- Serial digital decoder design with square circuit matrix and serial memory storage units
[NASA-CASE-NPO-10150] c08 N71-24650
- Electrically connected matrix of discrete solar cell blanks
[NASA-CASE-NPO-10591] c03 N72-22041
- MCLEOD GAGES**
- Automatic recording McLeod gage with three electrodes and solenoid valve connection
[NASA-CASE-XLE-03280] c14 N71-23093
- Bakeable McLeod gage
[NASA-CASE-XGS-01293-1] c35 N79-33450
- MEASURING INSTRUMENTS**
- Capacitance measuring device for determining flare accuracy on tapered tubes
[NASA-CASE-IKS-03495] c14 N69-39785
- Characteristics and performance of electrical system to determine angular rotation
[NASA-CASE-XMF-00447] c14 N70-33179
- Two plane balance for simultaneous measurements of multiple forces
[NASA-CASE-XAC-00073] c14 N70-34813
- Parallel motion suspension device for measuring instruments
[NASA-CASE-XNP-01567] c15 N70-41310
- Transducer for measuring deflections from vibrating structures
[NASA-CASE-XLA-03135] c32 N71-16428
- Gage for quality control of sealing surfaces of threaded boss
[NASA-CASE-XMF-04966] c14 N71-17658
- Equipment for measuring partial water vapor pressure in gas tank
[NASA-CASE-XMS-01618] c14 N71-20741
- Gage for measuring quantity of liquid in spherical tank in reduced gravity
[NASA-CASE-XMS-06236] c14 N71-21007
- Nonreusable energy absorbing device comprising ring member with plurality of recesses, cutting members, and guide member mounted in each recess
[NASA-CASE-XMF-10040] c15 N71-22877
- Ablation sensor for measuring surface ablation rate of material on vehicles entering earth's atmosphere on entry into planetary atmospheres
[NASA-CASE-XLA-01791] c14 N71-22991
- Test fixture for measuring moment of inertia of irregularly shaped body with multiple axes
[NASA-CASE-XGS-01023] c14 N71-22992
- Electron beam deflection devices for measuring electric fields
[NASA-CASE-XMF-10289] c14 N71-23699
- Device for measuring two orthogonal components of force with gallium flotation of measuring target for use in vacuum environments
[NASA-CASE-XAC-04885] c14 N71-23790
- Gage for measuring internal angle of flare on end of tube
[NASA-CASE-XMF-04415] c14 N71-24693
- Device utilizing RC rate generators for continuous slow speed measurement
[NASA-CASE-XMF-02966] c10 N71-24863
- Solid state force measuring electromechanical transducers made of piezoresistive materials
[NASA-CASE-ERC-10088] c26 N71-25490
- Design and development of layout tool for machine shop use to locate point in precise reference to straight or bowed reference edge
[NASA-CASE-FRC-10005] c15 N71-26145
- Volume displacement transducer for leak detection in hermetically sealed semiconductor devices
[NASA-CASE-ERC-10033] c14 N71-26672
- Deformation measuring apparatus with feedback control for arbitrarily shaped structures
[NASA-CASE-LAR-10098] c32 N71-26681
- Foam insulation thickness measuring and injection device for spacecraft applications
[NASA-CASE-MFS-20261] c14 N71-27005
- Resonant infrasonic gauging device for measuring liquid quantity in closed bladderless reservoir
[NASA-CASE-MSC-11847-1] c14 N72-11363
- Measuring roll alignment of test body with respect to reference body
[NASA-CASE-GSC-10514-1] c14 N72-20379
- Sensor for detecting and measuring energy, velocity and direction of travel of a cosmic dust particle
[NASA-CASE-GSC-10503-1] c14 N72-20381
- Pumping and metering dual piston system and monitor for reaction chamber constituents
[NASA-CASE-GSC-10218-1] c15 N72-21465
- Capacitive tank gaging device for monitoring one constituent of two phase fluid by sensing dielectric constant
[NASA-CASE-MFS-21629] c14 N72-22442
- Development of mechanical device for measuring distance of point within sphere from surface of sphere
[NASA-CASE-XLA-06683] c14 N72-28436
- Surface based altitude measuring system for accurately measuring altitude of airborne vehicle
[NASA-CASE-ERC-10412-1] c09 N73-12211
- Instrument for measuring magnitude and direction of flow velocity in flow field
[NASA-CASE-LAR-10855-1] c14 N73-13415
- Multiaxial vibration device for making vibration tests along orthogonal axes of test specimen
[NASA-CASE-MFS-20242] c14 N73-19421
- Material testing system with load sensor for applying and measuring cyclic tensile and compressive loads to test specimens
[NASA-CASE-MFS-20673] c14 N73-20476
- Development of droplet monitoring probe for use in analysis of droplet propagation in mixed-phase fluid stream
[NASA-CASE-NPO-10985] c14 N73-20478
- Device for measuring thermoelectric properties of materials under high pressure
[NASA-CASE-NPO-11749] c14 N73-28486
- Radio frequency source resistance measuring instruments of varied design

[NASA-CASE-NPO-11291-1] c14 N73-30388
 Absolute pressure measuring device for measuring
 gas density level in high vacuum range
 [NASA-CASE-LAR-10000] c14 N73-30394
 Thin film analyzer utilizing holographic
 techniques
 [NASA-CASE-MFS-20823-1] c16 N73-30476
 Three-axis adjustable loading structure
 [NASA-CASE-FRC-10051-1] c35 N74-13129
 Thin film gauge --- for measuring convective
 heat transfer rates along test surfaces in
 wind tunnels
 [NASA-CASE-NPO-10617-1] c35 N74-22095
 Apparatus and method for processing Korotkov
 sounds --- for blood pressure measurement
 [NASA-CASE-MSC-13999-1] c52 N74-26626
 Electric field measuring and display system ---
 for cloud formations
 [NASA-CASE-KSC-10731-1] c33 N74-27862
 Device for measuring tensile forces
 [NASA-CASE-MFS-21728-1] c35 N74-27865
 Measuring probe position recorder
 [NASA-CASE-LAR-10806-1] c35 N74-32877
 Meter for use in detecting tension in straps
 having predetermined elastic characteristics
 [NASA-CASE-MFS-22189-1] c35 N75-19615
 Thrust measurement
 [NASA-CASE-XMS-05731] c35 N75-29382
 Method and apparatus for measuring web material
 wound on a reel
 [NASA-CASE-GSC-11902-1] c38 N77-17495
 Optical instrument employing reticle having
 preselected visual response pattern formed
 thereon
 [NASA-CASE-ARC-10976-1] c74 N77-22950
 Direct reading inductance meter
 [NASA-CASE-NPO-13792-1] c35 N77-32455
 Ruler for making navigational computations
 [NASA-CASE-XNP-01458] c04 N78-17031
 Apparatus for handling micron size range
 particulate material
 [NASA-CASE-NPO-10151] c37 N78-17386
 Apparatus for measuring a sorbate dispersed in a
 fluid stream
 [NASA-CASE-ARC-10896-1] c35 N78-19465
 Condition sensor system and method
 [NASA-CASE-MSC-14805-1] c54 N78-32720
 Lightning current waveform measuring system
 [NASA-CASE-KSC-11018-1] c33 N79-10337
 Time domain phase measuring apparatus
 [NASA-CASE-GSC-12228-1] c33 N79-10338
 Fluid velocity measuring device
 [NASA-CASE-LAR-11729-1] c34 N79-12359
 Method and apparatus for measuring minority
 carrier lifetimes and bulk diffusion length in
 P-N junction solar cells
 [NASA-CASE-NPO-14100-1] c44 N79-12541
 Lightning current detector
 [NASA-CASE-KSC-11057-1] c33 N79-14305
 Lightning discharge identification system
 [NASA-CASE-KSC-11099-1] c33 N79-25313
 Contour measurement system
 [NASA-CASE-MFS-23726-1] c43 N79-26439
 Borehole geological assessment
 [NASA-CASE-NPO-14231-1] c46 N80-10709
 Displacement probes with self-contained exciting
 medium
 [NASA-CASE-LAR-11690-1] c35 N80-14371
 Faraday rotation measurement method and apparatus
 --- to receive RF signals from spacecraft
 which exhibits polarization characteristics
 due to spin stabilization
 [NASA-CASE-NPO-14839-1] c35 N80-16313
 Viscosity measuring instrument
 [NASA-CASE-NPO-14501-1] c35 N80-18357
 Method and device for destructive detection of a
 substance --- useful in determining the
 concentration of carbon fibers or pollutant
 particles
 [NASA-CASE-NPO-14940-1] c35 N80-21723
 Geological assessment probe
 [NASA-CASE-NPO-14558-1] c46 N80-24906
 Method and automated apparatus for detecting
 coliform organisms
 [NASA-CASE-MSC-16777-1] c51 N80-27067
 Skin friction measuring device for aircraft
 [NASA-CASE-FRC-11029-1] c06 N81-17057
 Heat pipe cooled probe
 [NASA-CASE-LAR-12588-1] c44 N81-24525

MECHANICAL DEVICES

Mechanical coordinate converter for use with
 spacecraft tracking antennas
 [NASA-CASE-XNP-00614] c14 N70-36907
 Load cell protection device using spring-loaded
 breakaway mechanism
 [NASA-CASE-XMS-06782] c32 N71-15974
 Design and development of satellite despin device
 [NASA-CASE-XNP-08523] c31 N71-20396
 Development of two force component measuring
 device
 [NASA-CASE-XAC-04886-1] c14 N71-20439
 Design, development, and characteristics of
 latching mechanism for operation in limited
 access areas
 [NASA-CASE-XMS-03745] c15 N71-21076
 Design of mechanical device for stirring several
 test tubes simultaneously
 [NASA-CASE-XAC-06956] c15 N71-21177
 Design and development of random function tracer
 for obtaining coordinates of points on contour
 maps
 [NASA-CASE-XLA-01401] c15 N71-21179
 Design and characteristics of device for closing
 canisters under high vacuum conditions
 [NASA-CASE-XLA-01446] c15 N71-21528
 Development of non-magnetic indexing device for
 orienting magnetic flux sensing instrument in
 magnetic field without generation of
 detrimental magnetic fields
 [NASA-CASE-XGS-02422] c15 N71-21529
 Design and development of module joint clamping
 device for application to solar array
 construction
 [NASA-CASE-XNP-02341] c15 N71-21531
 Hand controller operable about three
 respectively perpendicular axes and capable of
 actuating signal generators for attitude
 control devices
 [NASA-CASE-XMS-07487] c15 N71-23255
 Metal alloy bearing materials for space
 applications
 [NASA-CASE-XLE-05033] c15 N71-23810
 Mechanical actuator wherein linear motion
 changes to rotational motion
 [NASA-CASE-XGS-04548] c15 N71-24045
 Design and characteristics of device for showing
 amount of cable payed out from winch and load
 imposed
 [NASA-CASE-MSC-12052-1] c15 N71-24599
 Design and development of release mechanism for
 spacecraft components, releasable despin
 weights, and extensible gravity booms
 [NASA-CASE-XGS-08718] c15 N71-24600
 Apparatus for mechanically dispersing ultrafine
 metal powders subjected to shock waves
 [NASA-CASE-XLE-04946] c17 N71-24911
 Self lubricating gears and other mechanical
 parts having surface adapted to frictional
 contact
 [NASA-CASE-MFS-14971] c15 N71-24984
 Design and development of layout tool for
 machine shop use to locate point in precise
 reference to straight or bowed reference edge
 [NASA-CASE-FRC-10005] c15 N71-26145
 Design and development of linear actuator based
 on bimetallic spring expansion
 [NASA-CASE-NPO-10637] c15 N72-12409
 Characteristics of lightweight actuator for
 imparting linear motion using elongated output
 shaft
 [NASA-CASE-NPO-11222] c15 N72-25456
 Development of mechanical device for measuring
 distance of point within sphere from surface
 of sphere
 [NASA-CASE-XLA-06683] c14 N72-28436
 Development of thermal compensating structure
 which maintains uniform length with changes in
 temperature
 [NASA-CASE-MFS-20433] c15 N72-28496
 Development of mating flat surfaces to inhibit
 leakage of fluid around shafts
 [NASA-CASE-XLE-10326-2] c15 N72-29488
 Development of solar energy powered heliotrope
 assembly to orient solar array toward sun
 [NASA-CASE-GSC-10945-1] c21 N72-31637
 Design and construction of mechanical probe for
 determining if object is properly secured
 [NASA-CASE-MFS-20760] c14 N72-33377

Development and characteristics of rotary actuator for use on spacecraft to deploy and support pivotal structures such as solar panels [NASA-CASE-NPO-10680] c31 N73-14855

Collapsible support for antenna reflector applied to installation of spacecraft antennas [NASA-CASE-NPO-11751] c07 N73-24176

Pneumatic foot pedal operated fluidic exercising device [NASA-CASE-MSC-11561-1] c05 N73-32014

Mechanical exposure interlock device for preventing film overexposure in oscilloscope camera [NASA-CASE-LAR-10319-1] c14 N73-32322

Reefing system [NASA-CASE-LAR-10129-2] c37 N74-20063

Sprag solenoid brake --- development and operations of electrically controlled brake [NASA-CASE-MFS-21846-1] c37 N74-26976

Solid medium thermal engine [NASA-CASE-ARC-10461-1] c44 N74-33379

Automatic inoculating apparatus --- includes movable carriage, drive motor, and swabbing motor [NASA-CASE-LAR-11074-1] c51 N75-13502

Clock setter [NASA-CASE-LAR-11458-1] c35 N76-16392

Apparatus for positioning modular components on a vertical or overhead surface [NASA-CASE-LAR-11465-1] c37 N76-21554

Reel safety brake [NASA-CASE-GSC-11960-1] c37 N77-14479

Mechanical sequencer [NASA-CASE-MSC-19536-1] c37 N77-22482

Combined docking and grasping device [NASA-CASE-MFS-23088-1] c37 N77-23483

Wrist joint assembly [NASA-CASE-MFS-23311-1] c54 N78-17676

Tetherline system for orbiting satellites [NASA-CASE-MFS-23564-1] c15 N78-25119

Actuator mechanism [NASA-CASE-GSC-11883-2] c37 N78-31426

Mechanical end joint system for structural column elements [NASA-CASE-LAR-12482-1] c37 N80-22704

Quartz ball valve [NASA-CASE-NPO-14473-1] c37 N80-23654

Method and apparatus for holding two separate metal pieces together for welding [NASA-CASE-GSC-12318-1] c37 N80-23655

Heat treat fixture and method of heat treating [NASA-CASE-LAR-11821-1] c26 N80-28492

Fire extinguishing apparatus having a slidable mass for a penetrator nozzle --- for penetrating aircraft and shuttle orbiter skin [NASA-CASE-KSC-11064-1] c31 N81-14137

Device for coupling a first vehicle to a second vehicle [NASA-CASE-GSC-12429-1] c37 N81-14320

Apparatus for accurately preloading auger attachment means for frangible protective material [NASA-CASE-MSC-18791-1] c37 N81-24446

Compression test fixture [NASA-CASE-MSC-18723-1] c39 N81-24470

Locking mechanism for orthopedic braces [NASA-CASE-GSC-12082-2] c52 N81-25661

MECHANICAL DRIVES

Hydraulic drive mechanism for leveling isolation platforms [NASA-CASE-XMS-03252] c15 N71-10658

Antibacklash circuit for hydraulic drive system [NASA-CASE-XNP-01020] c03 N71-12260

Precision stepping drive device using cam disk [NASA-CASE-MFS-14772] c15 N71-17692

Incremental motion drive system applied to interferometer components [NASA-CASE-XNP-08897] c15 N71-17694

Ratchet mechanism for high speed operation at reduced backlash [NASA-CASE-MFS-12805] c15 N71-17805

Development of apparatus for automatically changing carriage speed of welding machine to obtain constant speed of torch along work surface [NASA-CASE-XMF-07069] c15 N71-23815

Drive system for parabolic tracking antenna with reversible motion and minimal backlash [NASA-CASE-NPO-10173] c15 N71-24696

Synchronous dc direct-drive system comprising multiple-loop hybrid control system controlling load directly connected to actuator [NASA-CASE-GSC-10065-1] c10 N71-27136

Energy absorption device in high precision gear train for protection against damage to components caused by stop loads [NASA-CASE-XNP-01848] c15 N71-28959

Automatic controlled drive mechanism for portable boring bar [NASA-CASE-XLA-03661] c15 N71-33518

Rotary actuator for use in environments with no rolling and sliding friction [NASA-CASE-NPO-10244] c15 N72-26371

Development and characteristics of rotary actuator for use on spacecraft to deploy and support pivotal structures such as solar panels [NASA-CASE-NPO-10680] c31 N73-14855

Optically actuated two position mechanical mover [NASA-CASE-NPO-13105-1] c37 N74-21060

Two speed drive system --- mechanical device for changing speed on rotating vehicle wheel [NASA-CASE-MFS-20645-1] c37 N74-23070

Concentric differential gearing arrangement [NASA-CASE-ARC-10462-1] c37 N74-27901

Geneva mechanism --- including star wheel and driver [NASA-CASE-NPO-13281-1] c37 N75-13266

Mechanical thermal motor [NASA-CASE-MFS-23062-1] c37 N77-12402

Mount for continuously orienting a collector dish in a system adapted to perform both diurnal and seasonal solar tracking [NASA-CASE-MFS-23267-1] c35 N77-20401

Hydraulic drain means for servo-systems [NASA-CASE-NPO-10316-1] c37 N77-22479

Mechanical sequencer [NASA-CASE-MSC-19536-1] c37 N77-22482

Gas turbine engine with convertible accessories [NASA-CASE-LEW-12390-1] c07 N78-17056

Wobble gear drive mechanism --- for aerospace environments [NASA-CASE-WOO-00625] c37 N78-17385

Toggle mechanism for pinching metal tubes [NASA-CASE-GSC-12274-1] c37 N79-28550

Antenna deployment mechanism for use with a spacecraft --- extensible and retractable telescopic antenna mast [NASA-CASE-GSC-12331-1] c18 N80-14183

Redundant motor drive system [NASA-CASE-MFS-23777-1] c37 N80-32716

Belt for transmitting power from a cogged driving member to a cogged driven member [NASA-CASE-GSC-12289-1] c37 N80-32717

Base drive for paralleled inverter systems [NASA-CASE-NPO-14163-1] c33 N81-14220

Speed control device for a heavy duty shaft --- solar sails for spacecraft propulsion [NASA-CASE-NPO-14170-1] c37 N81-15364

Variable speed drive [NASA-CASE-GSC-12643-1] c37 N81-24447

MECHANICAL ENGINEERING

Manual actuator --- for spacecraft exercising machines [NASA-CASE-MFS-21481-1] c37 N74-18127

Shaft seal assembly for high speed and high pressure applications [NASA-CASE-LEW-11873-1] c37 N79-22475

MECHANICAL MEASUREMENT

Strain gage for detecting and measuring mechanical strain in thermally strained specimens [NASA-CASE-FEC-10053] c14 N70-35587

Air brake device for absorbing and measuring power from rotating shafts [NASA-CASE-XLE-00720] c14 N70-40201

Water cooled gage for strain measurements in high temperature environments [NASA-CASE-XNP-09205] c14 N71-17657

Development of apparatus for measuring successive increments of strain on elastomers [NASA-CASE-XMF-04680] c15 N71-19489

Development of Hall effect transducer for converting mechanical shaft rotations into proportional electrical signals [NASA-CASE-LAR-10620-1] c09 N72-25255

Strain gage mounting assembly [NASA-CASE-NPO-13170-1] c35 N76-14430

Pulsed phase locked loop strain monitor
[NASA-CASE-LAR-12772-1] c33 N81-15195

Photomechanical transducer
[NASA-CASE-NPO-14363-1] c39 N81-25400

MECHANICAL PROPERTIES

Test apparatus for determining mechanical properties of refractory materials at high temperatures in vacuum or inert atmospheres
[NASA-CASE-XLE-00335] c14 N70-35368

Fixture for environmental exposure of structural materials under compression
[NASA-CASE-LAR-12602-1] c35 N81-19429

MECHANICS (PHYSICS)

Hovering type flying vehicle design and principle mechanisms for manned or unmanned use
[NASA-CASE-MSC-12111-1] c02 N71-11639

MECHANIZATION

Machine for use in monitoring fatigue life for a plurality of elastomeric specimens
[NASA-CASE-NPO-13731-1] c39 N78-10493

MEDICAL ELECTRONICS

Circuit for detecting initial systole and diastolic notch --- for monitoring arterial pressure
[NASA-CASE-LEW-11581-1] c54 N75-13531

Pocket ECG electrode
[NASA-CASE-ARC-11258-1] c52 N80-33081

Subcutaneous electrode structure
[NASA-CASE-ARC-11117-1] c52 N81-14612

MEDICAL EQUIPMENT

Electromedical garment, applying vectorcardiologic type electrodes to human torsos for data recording during physical activity
[NASA-CASE-XFR-10856] c05 N71-11189

Respiration analyzing method and apparatus for determining subjects oxygen consumption in aerospace environments
[NASA-CASE-XFR-08403] c05 N71-11202

Laser machining device with dielectric functioning as beam waveguide for mechanical and medical applications
[NASA-CASE-HQN-10541-2] c15 N71-27135

Zero power telemetry actuated switch for biomedical equipment
[NASA-CASE-ARC-10105] c09 N72-17153

Tilting table for testing human body in variety of positions while exercising on ergometer or other biomedical devices
[NASA-CASE-MPS-21010-1] c05 N73-30078

Automatic device for assaying urine on bacterial adenosine triphosphate content
[NASA-CASE-GSC-11169-2] c05 N73-32011

Servo-controlled intravital microscope system
[NASA-CASE-NPO-13214-1] c35 N75-25123

Heat sterilizable patient ventilator
[NASA-CASE-NPO-13313-1] c54 N75-27761

Medical subject monitoring systems --- multichannel monitoring systems
[NASA-CASE-MSC-14180-1] c52 N76-14757

Locking mechanism for orthopedic braces
[NASA-CASE-GSC-12082-1] c54 N76-22914

Readout electrode assembly for measuring biological impedance
[NASA-CASE-ARC-10816-1] c35 N76-24525

A cervix-to-rectum measuring device in a radiation applicator for use in the treatment of cervical cancer
[NASA-CASE-GSC-12081-2] c52 N77-26796

Corneal seal device
[NASA-CASE-LEW-12258-1] c52 N77-28716

Snap-in compressible biomedical electrode
[NASA-CASE-MSC-14623-1] c52 N77-28717

Tissue macerating instrument
[NASA-CASE-LEW-12668-1] c52 N78-14773

Flow compensating pressure regulator
[NASA-CASE-LEW-12718-1] c34 N78-25351

Intra-ocular pressure normalization technique and equipment
[NASA-CASE-LEW-12723-1] c52 N80-18690

Acoustic tooth cleaner
[NASA-CASE-LAR-12471-1] c52 N81-12724

Micro-fluid exchange coupling apparatus
[NASA-CASE-ARC-11114-1] c51 N81-14605

Urine collection device
[NASA-CASE-MSC-16433-1] c52 N81-24711

Spine immobilization apparatus
[NASA-CASE-ARC-11167-1] c52 N81-25662

System for moving a probe to follow movements of tissue
[NASA-CASE-NFO-15197-1] c52 N81-26697

Ion beam sputter-etched ventricular catheter for hydrocephalus shunt
[NASA-CASE-LEW-13107-1] c52 N81-27786

Low X-ray absorption aneurism clips
[NASA-CASE-LAR-12650-1] c52 N81-29768

MELTING POINTS

Mixed diamines for lower melting addition polyimide preparation and utilization
[NASA-CASE-LAR-12054-1] c27 N79-33316

MELTS (CRYSTAL GROWTH)

Growth of silicon carbide crystals on a seed while pulling silicon crystals from a melt
[NASA-CASE-NFO-13969-1] c76 N79-23798

Preparation of monotectic alloys having a controlled microstructure by directional solidification under dopant-induced interface breakdown
[NASA-CASE-MPS-23816-1] c26 N80-23419

Means for growing ribbon crystals without subjecting the crystals to thermal shock-induced strains
[NASA-CASE-NPO-14298-1] c76 N80-32244

Apparatus for use in the production of ribbon-shaped crystals from a silicon melt
[NASA-CASE-NPO-14297-1] c33 N81-19389

Electromigration process for the purification of molten silicon during crystal growth
[NASA-CASE-NPO-14831-1] c76 N81-19944

Apparatus and method for heating a material in a transparent ampoule --- crystal growth
[NASA-CASE-MPS-25436-1] c76 N81-30012

MEMBRANE STRUCTURES

Liquid junction for glass electrode or pH meters
[NASA-CASE-NPO-10682] c15 N70-34699

Expulsion and measuring device for determining quantity of liquid in tank under conditions of weightlessness
[NASA-CASE-XMS-01546] c14 N70-40233

Flexible composite membrane structure impervious to extremely reactive chemicals in rocket propellants
[NASA-CASE-XNP-08837] c18 N71-16210

Flexible barrier membrane comprising porous substrate and incorporating liquid gallium or indium metal used as sealant barriers for spacecraft walls and pumping liquid propellants
[NASA-CASE-XNP-08881] c17 N71-28747

Meteoroid capture cell construction
[NASA-CASE-MSC-12423-1] c91 N76-30131

Strong thin membrane structure --- solar sails
[NASA-CASE-NPO-14021-2] c27 N80-16163

In-situ cross linking of polyvinyl alcohol --- application to battery separator films
[NASA-CASE-LEW-13135-2] c27 N81-24257

MEMBRANES

Apparatus for measuring polymer membrane expansion in electrochemical cells
[NASA-CASE-XGS-03865] c14 N69-21363

Separation cell with permeable membranes for fluid mixture component separation
[NASA-CASE-XMS-02952] c18 N71-20742

Water insoluble, cationic permselective membrane
[NASA-CASE-NFO-11091] c18 N72-22567

Dual membrane hollow fiber fuel cell and method of operating same
[NASA-CASE-NPO-13732-1] c44 N79-10513

Microelectrophoretic apparatus and process
[NASA-CASE-ARC-11121-1] c25 N79-14169

Dialysis system --- using ion exchange resin membranes permeable to urea molecules
[NASA-CASE-NPO-14101-1] c52 N80-14687

Method of forming dynamic membrane on stainless steel support
[NASA-CASE-MSC-18172-1] c26 N80-19237

Reverse osmosis membrane of high urea rejection properties --- water purification
[NASA-CASE-ARC-10980-1] c27 N80-23452

Membrane consisting of polyquaternary amine ion exchange polymer network interpenetrating the chains of thermoplastic matrix polymer
[NASA-CASE-NPO-14001-1] c27 N81-14076

Asymmetric polyimide separation membrane and method
[NASA-CASE-NFO-15431-1] c25 N81-29178

MEMORY

Method for making conductors for ferrite memory

arrays --- from pre-formed metal conductors
[NASA-CASE-LAR-16994-1] c24 N75-13032

MERCURY (METAL)

Interrupter switching device utilizing electrodes and mercury filled capillary tubes in which current flow vaporizes mercury as circuit breaker
[NASA-CASE-XNP-02251] c12 N71-20896

Method of forming ceramic to metal seals impervious to gaseous and liquid mercury at high temperature
[NASA-CASE-XNP-01263-2] c15 N71-26312

Development of system for delivering vaporized mercury to electron bombardment ion engine
[NASA-CASE-NPO-10737] c28 N72-11709

MERCURY VAPOR

Interrupter switching device utilizing electrodes and mercury filled capillary tubes in which current flow vaporizes mercury as circuit breaker
[NASA-CASE-XNP-02251] c12 N71-20896

Liquid-vapor interface seal design for turbine rotating shafts including helical and molecular pumps and liquid cooling of mercury vapor
[NASA-CASE-XNP-02862-1] c15 N71-26294

METABOLIC WASTES

Cooling system for removing metabolic heat from an hermetically sealed spacesuit
[NASA-CASE-ARC-11059-1] c54 N78-32721

Method and automatic apparatus for detecting coliform organisms
[NASA-CASE-MSC-16777-1] c51 N80-27067

METABOLISM

Automated analysis of oxidative metabolites
[NASA-CASE-ARC-10469-1] c25 N75-12086

Process for control of cell division
[NASA-CASE-LAR-10773-3] c51 N77-25769

Metabolic rate meter and method
[NASA-CASE-MSC-12239-1] c52 N79-21750

METAL BONDING

Bonding method for improving contact between lead telluride thermoelectric elements and tungsten electrodes
[NASA-CASE-XGS-04554] c15 N69-39786

Plasma spraying gun for forming diffusion bonded metal or ceramic coatings on substrates
[NASA-CASE-XLE-01604-2] c15 N71-15610

Describing metal valve pintle with encapsulated elastomeric body
[NASA-CASE-MSC-12116-1] c15 N71-17648

Apparatus for determining quality of bond between high density material and low density material
[NASA-CASE-MFS-13686] c15 N71-18132

Metal soldering with hydrazine monoperfluoro alkanoate for corrosion resistant coatings
[NASA-CASE-XNP-03459] c15 N71-21078

Leak resistant bonded elastomeric seal for secondary electrochemical cells
[NASA-CASE-XGS-02631] c03 N71-23006

Metal pattern bonding technique for cover glass attachment to silicon solar cells for space applications
[NASA-CASE-XLE-08569] c03 N71-23449

Development of electrical system for indicating optimum contact between electrode and metal surface to permit improved soldering operation
[NASA-CASE-KSC-10242] c15 N72-23497

Development of process for bonding resinous body in cavities of honeycomb structures
[NASA-CASE-MSC-12357] c15 N73-12489

Totally confined explosive welding --- apparatus to reduce noise level and protect personnel during explosive bonding
[NASA-CASE-LAR-10941-1] c37 N74-21057

Ultrasonically bonded valve assembly
[NASA-CASE-NPO-13360-1] c37 N75-25185

Bimetallic junctions
[NASA-CASE-LRW-11573-1] c26 N77-28265

Heat exchanger and method of making --- bonding rocket chambers with a porous metal matrix
[NASA-CASE-LRW-12441-1] c34 N79-13289

Totally confined explosive welding
[NASA-CASE-LAR-10941-2] c37 N79-13364

Method and apparatus for holding two separate metal pieces together for welding
[NASA-CASE-GSC-12318-1] c37 N80-23655

Heat exchanger and method of making --- rocket lining
[NASA-CASE-LRW-12441-2] c34 N80-24573

Method of bonding plasticized elastomer to metal and article produced thereby
[NASA-CASE-MFS-25181-1] c27 N81-16238

Thermal barrier coating system having improved adhesion
[NASA-CASE-LRW-13359-1] c27 N81-24265

METAL COATINGS

Joining aluminum to stainless steel by bonding aluminum coatings onto titanium coated stainless steel and brazing aluminum to aluminum/titanium coated steel
[NASA-CASE-MFS-07369] c15 N71-20443

Metal soldering with hydrazine monoperfluoro alkanoate for corrosion resistant coatings
[NASA-CASE-XNP-03459] c15 N71-21078

Low concentration alkaline solution treatment of aluminum with metal phosphate surface coatings to improve chemical bonding and reduce coating weight
[NASA-CASE-XLA-01995] c18 N71-23047

Organometallic compounds of niobium and tantalum useful for film deposition
[NASA-CASE-XNP-04023] c06 N71-28808

Silicide coating process and composition for protection of refractory metals from oxidation
[NASA-CASE-XLE-10910] c18 N71-29040

Selective nickel deposition on irradiation sensitive compounds
[NASA-CASE-LRW-10965-1] c15 N72-25452

Silicon carbide backward diode with coated lead attachment
[NASA-CASE-ERC-10224-2] c09 N73-27150

Panel for selectively absorbing solar thermal energy and the method of producing said panel
[NASA-CASE-MFS-22562-1] c44 N76-14595

Ultraviolet light reflective coating
[NASA-CASE-GSC-11786-1] c24 N76-24363

Metallic hot wire anemometer --- for high speed wind tunnel tests
[NASA-CASE-ARC-10911-1] c35 N77-20400

Solar cell collector
[NASA-CASE-LRW-12552-1] c44 N78-25527

Electromagnetic radiation energy arrangement --- coatings for solar energy absorption and infrared reflection
[NASA-CASE-WOO-00428-1] c32 N79-19186

METAL CUTTING

Metal shearing energy absorber
[NASA-CASE-HQN-10638-1] c15 N73-30460

Vee-notching device --- with adjustable carriage
[NASA-CASE-MFS-20730-1] c39 N74-13131

Hole cutter --- drill bits and rotating shaft
[NASA-CASE-MFS-22649-1] c37 N75-25186

Method and tool for machining a transverse slot about a bore
[NASA-CASE-LAR-11855-1] c37 N81-14319

METAL FATIGUE

Method for alleviating thermal stress damage in laminates
[NASA-CASE-LRW-12493-2] c24 N81-26179

METAL FIBERS

Lightweight electrically-powered flexible thermal laminate --- made of metal and nonconductive yarns
[NASA-CASE-MSC-12662-1] c33 N79-12331

A method and technique for installing light-weight fragile, high-temperature fiber insulation --- spacecraft heat sealing
[NASA-CASE-MSC-16934-2] c37 N81-16468

METAL FILMS

Means and methods of depositing thin films on substrates
[NASA-CASE-XNP-00595] c15 N70-34967

Metallic film diffusion into metal or ceramic surfaces for boundary lubrication in aerospace environments
[NASA-CASE-XLE-01765] c18 N71-10772

Bismuth and lead surface coatings for gas bearings in aerospace engineering
[NASA-CASE-XGS-02011] c15 N71-20739

Metallic film diffusion for boundary lubrication in aerospace engineering
[NASA-CASE-XLE-10337] c15 N71-24046

Magnetic recording head composed of ferrite core coated with thin film of aluminum-iron-silicon alloy

- [NASA-CASE-GSC-10097-1] c68 N71-27210
Thin absorbing metallic film for increased
visible light transmission
- [NASA-CASE-LAR-10836-1] c26 N72-27784
Deposition of alloy films --- on irregularly
shaped metal object
- [NASA-CASE-LEW-11262-1] c27 N74-13270
Multitarget sequential sputtering apparatus
- [NASA-CASE-NPO-13345-1] c37 N75-19684
Method of forming metal hydride films
- [NASA-CASE-LEW-12083-1] c37 N78-13436
METAL FINISHING
Selective plating of etched circuits without
removing previous plating
- [NASA-CASE-XGS-03120] c15 N71-24047
Surface finishing --- for aircraft wings
- [NASA-CASE-MSC-12631-1] c24 N77-28225
METAL FOILS
Characteristics of device for folding thin
flexible sheets into compact configuration
- [NASA-CASE-XLA-00137] c15 N70-33180
Passive thermal control coating on aluminum foil
laminates for inflatable spacecraft surfaces
- [NASA-CASE-XLA-01291] c33 N70-36617
Development and characteristics of thermal
radiation shielding of refractory metal foil
used for induction furnace
- [NASA-CASE-XLE-03432] c33 N71-24145
Method of making porous conductive supports for
electrodes --- by electroforming and stacking
nickel foils
- [NASA-CASE-GSC-11367-1] c44 N74-19692
Method and apparatus for tensile testing of
metal foil
- [NASA-CASE-LAR-10208-1] c35 N76-18400
Process for preparing high temperature polyimide
film laminates
- [NASA-CASE-LAR-12742-1] c24 N81-12174
Hot foil transducer skin friction sensor
- [NASA-CASE-LAR-12321-1] c35 N81-12390
METAL FUELS
Preparing oxidizer coated metal fuel particles
- [NASA-CASE-NPO-11975-1] c28 N74-33209
METAL HALIDES
Process for making anhydrous metal halides
- [NASA-CASE-LEW-11860-1] c37 N76-18458
High power metallic halide laser
- [NASA-CASE-NPO-14782-1] c36 N80-18381
METAL HYDRIDES
Method of forming metal hydride films
- [NASA-CASE-LEW-12083-1] c37 N78-13436
METAL IONS
Chemical synthesis of thermally stable
organometallic polymers with divalent metal
ion and tetraphenylphosphonitrilic units
- [NASA-CASE-BQN-10364] c06 N71-27363
Electrically conductive palladium containing
polyimide films
- [NASA-CASE-LAR-12705-1] c33 N80-24549
METAL JOINTS
Leakproof soft metal seal for use in very high
vacuum systems operating at cryogenic
temperatures
- [NASA-CASE-XGS-02441] c15 N70-41629
Non-floating universal joint
- [NASA-CASE-MSC-19546-1] c37 N77-25536
METAL MATRIX COMPOSITES
High strength reinforced metallic composites for
applications over wide temperature range
- [NASA-CASE-XLE-02428] c17 N70-33288
Process for producing dispersion strengthened
nickel with aluminum comprising metallic
matrices embedded with oxides or other
hyperfine compounds
- [NASA-CASE-XLE-06969] c17 N71-24142
Self lubricating gears and other mechanical
parts having surface adapted to frictional
contact
- [NASA-CASE-MFS-14971] c15 N71-24584
Development of procedure for improved
distribution of refractory compounds and
micro-constituents in refractory metal matrix
- [NASA-CASE-XLE-03940-2] c17 N72-28536
Method of preparing graphite reinforced aluminum
composite
- [NASA-CASE-MFS-21077-1] c24 N75-28135
Method of making reinforced composite structure
- [NASA-CASE-LEW-12619-1] c24 N77-19171
Fuselage structure using advanced technology
metal matrix fiber reinforced composites
- [NASA-CASE-LAR-11688-1] c05 N78-18045
Heat exchanger and method of making --- bonding
rocket chambers with a porous metal matrix
- [NASA-CASE-LEW-12441-1] c34 N79-13289
Preparation of monotectic alloys having a
controlled microstructure by directional
solidification under dopant-induced interface
breakdown
- [NASA-CASE-MFS-23816-1] c26 N80-23419
Heat exchanger and method of making --- rocket
lining
- [NASA-CASE-LEW-12441-2] c34 N80-24573
Method for alleviating thermal stress damage in
laminates --- metal matrix composites
- [NASA-CASE-LEW-12493-1] c24 N81-17170
Method for alleviating thermal stress damage in
laminates
- [NASA-CASE-LEW-12493-2] c24 N81-26179
METAL OXIDE SEMICONDUCTORS
Gyrator circuit using MOS field effect transistors
- [NASA-CASE-MFS-21433] c09 N73-20232
Radiation hardening of MOS devices by boron ---
for stabilizing gate threshold potential of
field effect device
- [NASA-CASE-GSC-11425-1] c76 N74-20329
Integrated P-channel MOS gyrator
- [NASA-CASE-MFS-22343-1] c33 N74-34638
Radiation hardening of MOS devices by boron ---
for stabilizing gate threshold potential
- [NASA-CASE-GSC-11425-2] c76 N75-25730
Solar cell collector
- [NASA-CASE-LEW-12552-1] c44 N78-25527
Multilevel metallization method for fabricating
a metal oxide semiconductor device
- [NASA-CASE-MFS-23541-1] c76 N79-14906
Method of making V-MOS field effect transistors
utilizing a two-step anisotropic etching and
ion implantation
- [NASA-CASE-GSC-12515-1] c33 N81-26360
Schottky barrier solar cell
- [NASA-CASE-NPO-13689-2] c44 N81-29525
METAL OXIDES
Process for producing dispersion strengthened
nickel with aluminum comprising metallic
matrices embedded with oxides or other
hyperfine compounds
- [NASA-CASE-XLE-06969] c17 N71-24142
Photofabrication techniques for selective
removal of conductive metals oxide coatings
from nonconductive substrates
- [NASA-CASE-BEC-10108] c06 N72-21094
Producing metal powders of controlled particle
size by reducing oxide using reactive metal
vapor in vacuum
- [NASA-CASE-XLE-06461] c17 N72-22530
Method for obtaining oxygen from lunar or
similar soil
- [NASA-CASE-MSC-12408-1] c46 N74-13011
Method of forming dynamic membrane on stainless
steel support
- [NASA-CASE-MSC-18172-1] c26 N80-19237
Method for depositing an oxide coating ---
producing solar panels
- [NASA-CASE-LEW-13131-1] c26 N81-24230
Method of forming oxide coatings
- [NASA-CASE-LEW-13132-1] c44 N81-27616
METAL PARTICLES
Magnetohydrodynamic generator for mixing
nonconductive gas and liquid metal mist to
form slugs
- [NASA-CASE-XLE-02083] c03 N69-39983
Cermet for nuclear fuel constructed by pressing
metal coated ceramic particles in die at
temperature to cause bonding of metal
coatings, and tested for thermal stability
- [NASA-CASE-LEW-10219-1] c18 N71-28729
Preparing oxidizer coated metal fuel particles
- [NASA-CASE-NPO-11975-1] c28 N74-33209
METAL PLATES
Development of large area micrometeoroid impact
detector panels
- [NASA-CASE-XLA-05906] c31 N71-16221
Tungsten-coated tungsten-uranium dioxide nuclear
fuel plates
- [NASA-CASE-XLE-00209] c22 N73-32528
Strain arrestor plate for fused silica tile ---
bonding of thermal insulation to metallic

- plates or structural parts
[NASA-CASE-MSC-14182-1] c27 N76-14264
Heat treat fixture and method of heat treating
[NASA-CASE-LAR-11821-1] c26 N80-28492
- METAL POWDER**
Production of refractory bodies with controlled porosity by pressing and heating mixtures of refractory and inert metal powders
[NASA-CASE-LEW-10393-1] c17 N71-15468
Electrode sealing and insulation for fuel cells containing caustic liquid electrolytes using powdered plastic and metal
[NASA-CASE-XMS-01625] c15 N71-23022
Apparatus for mechanically dispersing ultrafine metal powders subjected to shock waves
[NASA-CASE-XLE-04946] c17 N71-24911
Method to produce high purity copper fluoride by heating copper hydroxyfluoride powder and subjecting to flowing fluorine gas
[NASA-CASE-LEW-10794-1] c06 N72-17093
Producing metal powders of controlled particle size by reducing oxide using reactive metal vapor in vacuum
[NASA-CASE-XLE-06461] c17 N72-22530
Development of apparatus for producing metal powder particles of controlled size
[NASA-CASE-XLE-06461-2] c17 N72-28535
Metal plating process employing spraying of metallic power/peening particle mixture
[NASA-CASE-GSC-11163-1] c15 N73-32360
- METAL SHEETS**
Fatigue testing apparatus with light shield and infrared reflector for high temperature evaluation of loaded sheet samples
[NASA-CASE-XLA-C1782] c14 N71-26136
Method of making pressure tight seal for super alloy
[NASA-CASE-LAR-10170-1] c37 N74-11301
Method of making an explosively welded scarf joint
[NASA-CASE-LAR-11211-1] c37 N75-12326
Process for making sheets with parallel pores of uniform size
[NASA-CASE-GSC-10984-1] c37 N75-26371
Apparatus for welding sheet material --- butt joints
[NASA-CASE-XMS-01330] c37 N75-27376
- METAL SPINNING**
Apparatus and method for spin forming tubular elbows with high strength, uniform thickness, and close tolerances
[NASA-CASE-XMF-01083] c15 N71-22723
- METAL STRIPS**
Metal ribbon wrapped outer wall for regeneratively cooled combustion chamber
[NASA-CASE-XLE-00164] c15 N70-36411
Metal strip mounting arrangement for solar cell arrays on spacecraft
[NASA-CASE-XGS-01475] c03 N71-11058
Forming tubes from long thin flat metal strips
[NASA-CASE-XGS-04175] c15 N71-18579
High speed shutter --- electrically actuated ribbon loop for shuttering optical or fluid passageways
[NASA-CASE-ARC-10516-1] c70 N74-21300
- METAL SURFACES**
Condenser-separator for dehumidifying air utilizing sintered metal surface
[NASA-CASE-XLA-08645] c15 N69-21465
Nickel plating onto etched aluminum castings
[NASA-CASE-XNP-04148] c17 N71-24830
High thermal emittance black surface coatings and process for applying to metal and metal alloy surfaces used in radiative cooling of spacecraft
[NASA-CASE-XLA-06199] c15 N71-24875
Method for treating metal surfaces to prevent secondary electron transmission
[NASA-CASE-XNP-09469] c24 N71-25555
Method of forming ceramic to metal seals impervious to gaseous and liquid mercury at high temperature
[NASA-CASE-XNP-01263-2] c15 N71-26312
Anodizing method for providing metal surfaces with temperature reducing coatings against flames
[NASA-CASE-XLE-00035] c33 N71-29151
Thin film gauge --- for measuring convective heat transfer rates along test surfaces in wind tunnels
- [NASA-CASE-NFO-10617-1] c35 N74-22095
Surface finishing
[NASA-CASE-MSC-12631-3] c27 N81-14077
Improved refractory coatings --- sputtered coatings on substrates that form stable nitrides
[NASA-CASE-LEW-23169-2] c26 N81-16209
Method of cold welding using ion beam technology
[NASA-CASE-LEW-12982-1] c37 N81-19455
Corrosion resistant thermal barrier coating --- protecting gas turbines and other engine parts
[NASA-CASE-LEW-13088-1] c26 N81-25188
- METAL VAPOR LASERS**
Method and apparatus for convection control of metallic halide vapor density in a metallic halide laser
[NASA-CASE-NFO-15021-1] c36 N80-20574
- METAL VAPORS**
Magnetohydrodynamic generator for mixing nonconductive gas and liquid metal mist to form slugs
[NASA-CASE-XLE-02083] c03 N69-39983
Apparatus for producing hydrocarbon slurry containing small particles of magnesium for use as jet aircraft fuel
[NASA-CASE-XLE-00010] c15 N70-33382
Inert gas metallic vapor laser
[NASA-CASE-NFO-13449-1] c36 N75-32441
Isotope separation using metallic vapor lasers
[NASA-CASE-NFO-13550-1] c36 N77-26477
Method and apparatus for convection control of metallic halide vapor density in a metallic halide laser
[NASA-CASE-NFO-15021-1] c36 N80-20574
- METAL WORKING**
Controlled arc spot welding method
[NASA-CASE-XMF-00392] c15 N70-34814
Method and apparatus for shaping and joining large diameter metal tubes using magnetomotive forces
[NASA-CASE-XMF-05114] c15 N71-17650
Description of protective device for providing safe operating conditions around work piece in machine or metal working tool
[NASA-CASE-XLE-01092] c15 N71-22797
Description of portable milling tool for milling tube or pipe ends to desired shape and thickness
[NASA-CASE-XMF-03511] c15 N71-22799
Development and characteristics of frusto-conical die nib for extrusion of refractory metals
[NASA-CASE-XLE-06773] c15 N71-23817
Portable magnetomotive hammer for metal working
[NASA-CASE-XMF-03793] c15 N71-24833
Method and apparatus for portable high precision magnetomotive bulging, constricting, and joining of large diameter metal tubes
[NASA-CASE-XMF-05114-3] c15 N71-24865
Insert facing tool --- manually operated cutting tool for forming studs in honeycomb material
[NASA-CASE-MFS-21485-1] c37 N74-25968
Apparatus for forming dished ion thruster grids
[NASA-CASE-LEW-11694-2] c37 N76-14461
Holding fixture for a hot stamping press
[NASA-CASE-GSC-12619-1] c37 N81-16470
- METAL-METAL BONDING**
Joining aluminum to stainless steel by bonding aluminum coatings onto titanium coated stainless steel and brazing aluminum to aluminum/titanium coated steel
[NASA-CASE-MFS-07369] c15 N71-20443
Method for honeycomb panel bonding by thermosetting film adhesive with electrical heat means
[NASA-CASE-XMF-01402] c18 N71-21651
Capillary flow weld-bonding
[NASA-CASE-LAR-11726-1] c37 N76-27568
Mechanical bonding of metal
[NASA-CASE-LEW-12941-1] c31 N81-16329
Method of cold welding using ion beam technology
[NASA-CASE-LEW-12982-1] c37 N81-19455
- METALLIZING**
Multilevel metallization method for fabricating a metal oxide semiconductor device
[NASA-CASE-MFS-23541-1] c76 N79-14906
- METALLOGRAPHY**
Development of method for etching copper
[NASA-CASE-XGS-06306] c17 N71-16044
- METALLOSILOXANE POLYMER**
Thiophenyl ether disiloxanes and trisiloxanes

- useful as lubricant fluids
[NASA-CASE-MFS-22411-1] c37 N74-21058
- METALLURGY**
Induction heating of metallurgical specimens to high temperatures in coil furnace
[NASA-CASE-XLE-04026] c14 N71-23267
Method of purifying metallurgical grade silicon employing reduced pressure atmospheric control
[NASA-CASE-NPO-14474-1] c26 N80-14229
- METALS**
Transpiration cooled turbine blade made from metallic or ceramic wires
[NASA-CASE-XLE-00020] c15 N70-33226
Self lubricating fluoride-metal composite materials for outer space applications
[NASA-CASE-XLE-08511] c18 N71-23710
Punch and die device for forming convolution series in thin gage metal hemispheres
[NASA-CASE-XNP-05297] c15 N71-23811
Device for bending metal ribbon or wire
[NASA-CASE-XLA-05966] c15 N72-12408
Metal plating process employing spraying of metallic power/peening particle mixture
[NASA-CASE-GSC-11163-1] c15 N73-32360
Glass-to-metal seals comprising relatively high expansion metals
[NASA-CASE-LEW-10698-1] c37 N74-21063
Scanning nozzle plating system --- for etching or plating metals on substrates without masking
[NASA-CASE-NPO-11758-1] c31 N74-23065
Production of pure metals
[NASA-CASE-LEW-10906-1] c25 N74-30502
Thermocouple tape --- developed from thermoelectrically different metals
[NASA-CASE-LEW-11072-2] c35 N76-15434
Method of forming shrink-fit compression seal
[NASA-CASE-LAR-11563-1] c37 N77-23482
Solar cells having integral collector grids
[NASA-CASE-LEW-12819-1] c44 N79-11467
- METASTABLE STATE**
Stabilization of He2(a 3 Sigma u+ molecules in liquid helium by optical pumping for vacuum UV laser 6
[NASA-CASE-NPO-13993-1] c72 N79-13826
- METEORITE COLLISIONS**
Pressurized panel meteoroid detector
[NASA-CASE-XLA-08916-2] c14 N73-28487
Method of and device for determining the characteristics and flux distribution of micrometeorites --- scanning puncture holes in sheet material with photoelectric cell
[NASA-CASE-NPO-12127-1] c91 N74-13130
- METEORITES**
Method for making pressurized meteoroid penetration detector panels
[NASA-CASE-XLA-08916] c15 N71-29018
- METEORITIC DAMAGE**
Capacitor sandwich structure containing metal sheets of known thickness for counting penetration rates of meteoroids
[NASA-CASE-XLE-01246] c14 N71-10797
- METEOROID HAZARDS**
Meteoroid impact position locator aid for manned space station
[NASA-CASE-LAR-10629-1] c35 N75-33367
- METEOROID PROTECTION**
Development and characteristics of protective coatings for spacecraft
[NASA-CASE-XNP-02507] c31 N71-17679
- METEOROLIDS**
Cameras for photographing meteors in selected sky area
[NASA-CASE-LAR-10226-1] c14 N73-19419
Meteoroid capture cell construction
[NASA-CASE-MSC-12423-1] c91 N76-30131
- METEOROLOGICAL BALLOONS**
Aerodynamically stable meteorological balloon using surface roughness effect
[NASA-CASE-XNP-04163] c02 N71-23007
- METHANE**
High temperature gas lubricant consisting of two fluoro-bromo-methanes
[NASA-CASE-XLE-00353] c18 N70-39897
- MICHELSON INTERFEROMETERS**
Michelson interferometer with photodetector for optical direction sensing
[NASA-CASE-NPO-10320] c14 N71-17655
Servo system for retroreflector of Michelson interferometer
[NASA-CASE-NPO-10300] c14 N71-17662
- Computerized optical system for producing multiple images of a scene simultaneously
[NASA-CASE-MSC-12404-1] c23 N73-13661
Interferometer mirror tilt correcting system
[NASA-CASE-NPO-13687-1] c35 N78-18391
- MICROANALYSIS**
Plural output optometric sample cell and analysis system
[NASA-CASE-NPO-10233-1] c74 N78-33913
- MICROBALANCES**
Null-type vacuum microbalance for measuring minute mechanical displacements
[NASA-CASE-XAC-00472] c15 N70-40180
Microbalance --- for measuring particle mass
[NASA-CASE-MSC-11242] c35 N78-17358
- MICROBALLOONS**
Method of forming frozen spheres in a force-free drop tower --- microballoons for inertial confinement fusion
[NASA-CASE-NPO-14845-1] c31 N81-16328
- MICROBIOLOGY**
Development of variable angle device for positioning test tubes to permit optimum drying of culture medium
[NASA-CASE-LAR-10507-1] c11 N72-25284
Apparatus for microbiological sampling --- including automatic swabbing
[NASA-CASE-LAR-11069-1] c35 N75-12272
Automatic inoculating apparatus --- includes movable carriage, drive motor, and swabbing motor
[NASA-CASE-LAR-11074-1] c51 N75-13502
Automatic microbial transfer device
[NASA-CASE-LAR-11354-1] c35 N75-27330
Application of luciferase assay for ATP to antimicrobial drug susceptibility
[NASA-CASE-GSC-12039-1] c51 N77-22794
Electrochemical detection device --- for use in microbiology
[NASA-CASE-LAR-11922-1] c25 N79-24073
Indirect microbial detection
[NASA-CASE-LAR-12520-1] c51 N81-28698
- MICROCHANNELS**
Low intensity X-ray and gamma-ray imaging spectrometer
[NASA-CASE-GSC-12587-1] c35 N80-29635
- MICROCRACKS**
System for detecting substructure microfractures and method therefore
[NASA-CASE-NPO-14192-1] c39 N80-10507
Laser surface fusion of plasma sprayed ceramic turbine seals
[NASA-CASE-LEW-13269-1] c27 N81-22190
- MICROELECTRONICS**
Separation of semiconductor wafer into chips bounded by scribe lines
[NASA-CASE-ERC-10138] c26 N71-14354
Vibrophonocardiograph comprising low weight and small volume piezoelectric microphone with amplifier having high input impedance for high sensitivity and low frequency response
[NASA-CASE-XPR-07172] c05 N71-27234
Electrical connections for thin film hybrid microcircuits
[NASA-CASE-XMS-02182] c10 N71-28783
Method for coating through-holes in ceramic substrates used in fabricating miniaturized electronic circuits
[NASA-CASE-XNP-05999] c15 N71-29032
Precision surface cutter for screen circuit negatives and other microcircuits
[NASA-CASE-XLA-09843] c15 N72-27485
Material compositions and processes for developing dielectric thick films used in microcircuit capacitors
[NASA-CASE-LAR-10294-1] c26 N72-28762
Active tuned circuits for microelectronic construction
[NASA-CASE-GSC-11340-1] c10 N72-33230
Automatic visual inspection system for microelectronics
[NASA-CASE-NPO-13282] c38 N78-17396
Inductorless narrow-band filter/amplifier
[NASA-CASE-GSC-12410-1] c33 N79-24260
Method and apparatus for fabricating improved solar cell modules
[NASA-CASE-NPO-14416-1] c44 N81-14389

- High voltage V-groove solar cell
[NASA-CASE-LEW-13401-1] c44 N81-16529
- MICROFILMS**
Apparatus for semiautomatic inspection of microfilmed documents for density, resolution, size, and position
[NASA-CASE-MFS-20240] c14 N71-26788
- MICROINSTRUMENTATION**
Apparatus for handling micron size range particulate material
[NASA-CASE-NPO-10151] c37 N78-17386
- MICROMETEORITES**
Method of and device for determining the characteristics and flux distribution of micrometeorites --- scanning puncture holes in sheet material with photoelectric cell
[NASA-CASE-NPO-12127-1] c91 N74-13130
Micrometeoroid velocity and trajectory analyzer
[NASA-CASE-GSC-11892-1] c35 N76-15433
- MICROMETEOROIDS**
Particle detector for measuring micrometeoroid velocity in space
[NASA-CASE-XLA-00495] c14 N70-41332
Piezoelectric transducer for detecting and measuring micrometeoroids
[NASA-CASE-XAC-01101] c14 N70-41957
Pressurized cell micrometeoroid detector
[NASA-CASE-XLA-00936] c14 N71-14996
Development of large area micrometeoroid impact detector panels
[NASA-CASE-XLA-05906] c31 N71-16221
Rotary bead dropper and selector for testing micrometeorite transducers
[NASA-CASE-XGS-03304] c09 N71-22588
Measuring micrometeoroid depth of penetration into various materials
[NASA-CASE-XLA-00941] c14 N71-23240
Structure of fabric layers for micrometeoroid protection garment with capability for eliminating heat shorts for use in manufacturing space suits
[NASA-CASE-MSC-12109] c18 N71-26285
Micrometeoroid analyzer using arrays of interconnected capacitors and ion detector
[NASA-CASE-ARC-10443-1] c14 N73-20477
Cold cathode discharge tube with pressurized gas cell for meteoroid detection in space
[NASA-CASE-LAR-10483-1] c14 N73-32327
Deployable pressurized cell structure for a micrometeoroid detector
[NASA-CASE-LAR-10295-1] c35 N74-21062
Semiconductor projectile impact detector
[NASA-CASE-MFS-23008-1] c35 N78-18390
- MICROMETERS**
Apparatus for handling micron size range particulate material
[NASA-CASE-NPO-10151] c37 N78-17386
- MICROMINIATURIZATION**
Miniaturized radiometer for detecting low level thermal radiation
[NASA-CASE-XLA-04556] c14 N69-27484
- MICROORGANISMS**
Development of bacteriostatic conformal coating and methods of application
[NASA-CASE-GSC-10007] c18 N71-16046
Portable vacuum probe surface sampler for sampling large surface areas with relatively light loading densities of microorganisms
[NASA-CASE-LAR-10623-1] c14 N73-30395
Measurement of gas production of microorganisms --- using pressure sensors
[NASA-CASE-LAR-11326-1] c35 N75-33368
Biocontamination and particulate detection system
[NASA-CASE-NPO-13953-1] c35 N79-28527
Indirect microbial detection
[NASA-CASE-LAR-12520-1] c51 N81-28658
Apparatus and process for microbial detection and enumeration
[NASA-CASE-LAR-12709-1] c51 N81-29727
- MICROPARTICLES**
Micropacked column for rapid chromatographic analysis using low gas flow rates
[NASA-CASE-XNP-04816] c06 N69-39936
- MICROPHONES**
Audio signal processing system for noise surge elimination at low amplitude audio input
[NASA-CASE-MSC-12223-1] c07 N71-26181
Vibrophonocardiograph comprising low weight and small volume piezoelectric microphone with amplifier having high input impedance for high sensitivity and low frequency response
[NASA-CASE-XPR-07172] c05 N71-27234
Development of wind tunnel microphone structure to minimize effects of vibrations and eliminate unwanted signals in microphone output
[NASA-CASE-XNP-00250] c11 N71-28779
High-temperature microphone system --- for measuring pressure fluctuations in gases at high temperature
[NASA-CASE-LAR-12375-1] c32 N79-24203
- MICROPROCESSORS**
Microcomputerized electric field meter diagnostic and calibration system
[NASA-CASE-KSC-11035-1] c35 N78-28411
- MICROSCOPES**
Absolute focus locking device for microscopes to maintain set focus for extended time period
[NASA-CASE-LAR-10184] c14 N72-22445
Hand-held, lightweight, portable photomicroscope
[NASA-CASE-ARC-10468-1] c14 N73-33361
- MICROSTRIP TRANSMISSION LINES**
Thin conformal antenna array for microwave power conversions
[NASA-CASE-NPO-13886-1] c32 N78-24391
Multiple band circularly polarized microstrip antenna
[NASA-CASE-MSC-18334-1] c32 N80-32604
- MICROSTRUCTURE**
Production of high strength refractory compounds and microconstituents into refractory metal matrix
[NASA-CASE-XLE-03940] c18 N71-26153
Development of procedure for improved distribution of refractory compounds and microconstituents in refractory metal matrix
[NASA-CASE-XLE-03940-2] c17 N72-28536
Diffusion welding --- heat treatment of nickel alloys following single step vacuum welding process
[NASA-CASE-LEW-11388-2] c37 N74-21055
Method of determining bond quality of power transistors attached to substrates --- X ray inspection of junction microstructure
[NASA-CASE-MFS-21931-1] c37 N75-26372
Preparation of monotectic alloys having a controlled microstructure by directional solidification under dopant-induced interface breakdown
[NASA-CASE-MFS-23816-1] c26 N80-23419
- MICROTHRUST**
Electrostatic microthrust propulsion system with annular slit colloid thruster
[NASA-CASE-GSC-10709-1] c28 N71-25213
Heated porous plug microthruster for spacecraft reaction jet controlled systems such as fuel flow regulation, propellant disassociation, and heat transfer augmentation
[NASA-CASE-GSC-10640-1] c28 N72-18766
- MICROWAVE AMPLIFIERS**
Thermally sensitive tuning probe for nullifying detuning effects in microwave cavity resonator of amplifier
[NASA-CASE-XNP-00449] c14 N70-35220
Superconducting gyrocon for high power high efficiency microwave generator/amplifier application
[NASA-CASE-NFO-14975-1] c33 N80-29584
Maser amplifier slow wave structure --- detecting weak signals from spacecraft
[NASA-CASE-NFO-15211-1] c36 N81-24425
Resonant isolator for maser amplifier
[NASA-CASE-NFO-15201-1] c36 N81-24426
- MICROWAVE ANTENNAS**
Microwave power receiving antenna solving heat dissipation problems by construction of elements as heat pipe devices
[NASA-CASE-MFS-20333] c09 N71-13486
Development and characteristics of low-noise multimode monopulse antenna feed system for use with microwave communication equipment
[NASA-CASE-XNP-01735] c07 N71-22750
Microwave omnidirectional antenna for use on spacecraft
[NASA-CASE-XLA-03114] c09 N71-22888
Portable equipment for validating C band launch pad antennas and transmission lines used for spacecraft checkout
[NASA-CASE-XKS-10543] c07 N71-26292

- Multipurpose microwave antenna, employing dish reflector with plural coaxial horn feeds
[NASA-CASE-NPO-11264] c07 N72-25174
- Omnidirectional antenna array with circumferential slots for mounting on cylindrical space vehicle
[NASA-CASE-LAR-10163-1] c09 N72-25247
- Characteristics of microwave antenna with conical reflectors to generate plane wave front
[NASA-CASE-NPO-11661] c07 N73-14130
- Thin conformal antenna array for microwave power conversions
[NASA-CASE-NPO-13886-1] c32 N78-24391
- MICROWAVE CIRCUITS**
- Quasi-optical microwave circuit with dielectric body for use with oversize waveguides
[NASA-CASE-ERC-10011] c07 N71-29065
- Microwave integrated circuit for Josephson voltage standards
[NASA-CASE-MFS-23845-1] c33 N81-17348
- MICROWAVE COUPLING**
- Microwave waveguide switch with rotor position control
[NASA-CASE-XP-06507] c09 N71-23548
- MICROWAVE EQUIPMENT**
- Apparatus for generating microwave signals at progressively related phase angles for driving antenna array
[NASA-CASE-ERC-10046] c10 N71-18722
- Broadband microwave waveguide window to compensate dielectric material filling
[NASA-CASE-XP-08880] c09 N71-24608
- Dual frequency feed systems for Cassegrainian antennas
[NASA-CASE-NPO-13091-1] c09 N73-12214
- Resonant waveguide stark cell --- using microwave spectrometers
[NASA-CASE-LAR-11352-1] c33 N75-26245
- Refrigerated coaxial coupling --- for microwave equipment
[NASA-CASE-NPO-13504-1] c33 N75-30430
- Microwave dichroic plate
[NASA-CASE-GSC-12171-1] c33 N79-28416
- Unequal split microwave power divider
[NASA-CASE-LAR-12889-1] c33 N81-31483
- MICROWAVE FILTERS**
- Microwave power divider for providing variable output power to output waveguide in fixed waveguide system
[NASA-CASE-NPO-11031] c07 N71-33606
- Selective bandpass resonators using bandstop resonator pairs for microwave frequency operation
[NASA-CASE-GSC-10990-1] c09 N73-26195
- MICROWAVE FREQUENCIES**
- Varactor microwave frequency mixing circuit
[NASA-CASE-XGS-02171] c09 N69-24324
- Voltage tunable Gunn effect semiconductor for microwave generation
[NASA-CASE-XER-07894] c09 N71-18721
- Multinode antenna feed system for microwave and broadband communication
[NASA-CASE-GSC-11046-1] c07 N73-28013
- MICROWAVE OSCILLATORS**
- Microwave generator using Gunn effect for magnetic tuning
[NASA-CASE-NPO-12106] c09 N73-15235
- Electron beam controller --- using magnetic field to refocus spent electron beam in microwave oscillator tube
[NASA-CASE-LEW-11617-1] c33 N74-10195
- MICROWAVE RADIOMETERS**
- Input radio frequency circuit for switching type absolute temperature measuring radiometer for noise sources
[NASA-CASE-ERC-11020] c14 N71-26774
- Microwave limb sounder --- to measure trace gases in the upper atmosphere
[NASA-CASE-NPO-14544-1] c74 N79-34014
- Electromagnetic power absorber
[NASA-CASE-NPO-13830-1] c32 N80-14281
- CAT altitude avoidance system
[NASA-CASE-NPO-15351-1] c47 N81-16677
- MICROWAVE REFLECTOMETERS**
- Reflectometer for receiver input impedance match measurement
[NASA-CASE-XP-10843] c07 N71-11267
- Surface defect detection by reflected microwave radiation pattern
[NASA-CASE-ARC-10009-1] c15 N71-17822
- MICROWAVE RESONANCE**
- Microwave double resonance spectroscopy absorption cell for gas analysis
[NASA-CASE-LAR-10305] c14 N71-26137
- MICROWAVE SWITCHING**
- Design of gyrator circuit using operational amplifiers to replace ungrounded inductors
[NASA-CASE-XAC-10608-1] c09 N71-12517
- Microwave switching power divider --- for use in Earth orbiting satellites having spherical multi-element antenna arrays
[NASA-CASE-GSC-12420-1] c33 N80-21670
- MICROWAVE TRANSMISSION**
- Microwave power converter
[NASA-CASE-NPO-14068-1] c44 N78-19609
- Frequency translating phase conjugation circuit for active retrodirective antenna array --- microwave transmission
[NASA-CASE-NFO-14536-1] c32 N81-14185
- Solar power satellite system
[NASA-CASE-HQN-10949-1] c44 N81-16530
- Doppler radar having phase modulation of both transmitted and reflected return signals --- rangefinding
[NASA-CASE-MSC-18675-1] c32 N81-29312
- Waveguide cooling system
[NASA-CASE-NFO-15401-1] c33 N81-29344
- MICROWAVE TUBES**
- Electrostatic charged particle collector containing stacked electrodes for microwave tube
[NASA-CASE-LEW-11192-1] c09 N73-13208
- MICROWAVES**
- Radio frequency noise generator having microwave slow-wave structure in gas discharge plasma
[NASA-CASE-XER-11019] c09 N71-23598
- Method and apparatus for optically modulating light or microwave beam
[NASA-CASE-GSC-10216-1] c23 N71-26722
- Microwave waveguide mixer
[NASA-CASE-ERC-10179] c07 N72-20141
- Microwave power transmission system wherein level of transmitted power is controlled by reflections from receiver
[NASA-CASE-MFS-21470-1] c44 N74-19870
- Wide power range microwave feedback controller
[NASA-CASE-GSC-12146-1] c33 N78-32340
- Microwave power transmission beam safety system
[NASA-CASE-NFO-14224-1] c33 N80-18287
- MIDAIR COLLISIONS**
- Development and characteristics of electronic signalling system and data processing equipment for warning systems to avoid midair collisions between aircraft
[NASA-CASE-LAR-10717-1] c21 N73-30641
- MILLIMETER WAVES**
- Millimeter wave antenna system for spacecraft use
[NASA-CASE-GSC-10949-1] c07 N71-28965
- Millimeter wave pumped parametric amplifier
[NASA-CASE-GSC-11617-1] c33 N74-32660
- MILLING (MACHINING)**
- Rotary spindle lathe attachments for machining geometrical cones
[NASA-CASE-XMS-04292] c15 N71-22722
- Method for milling and drilling glass
[NASA-CASE-GSC-12636-1] c37 N80-29705
- Method and tool for machining a transverse slot about a bore
[NASA-CASE-LAR-11855-1] c37 N81-14319
- MILLING MACHINES**
- Electro-optical system for maintaining two-axis alignment during milling operations on large tank-sections
[NASA-CASE-XP-00908] c14 N70-40238
- Description of portable milling tool for milling tube or pipe ends to desired shape and thickness
[NASA-CASE-XP-03511] c15 N71-22799
- Grinding arrangement for ball nose milling cutters
[NASA-CASE-LAR-10450-1] c37 N74-27905
- MINERAL DEPOSITS**
- Underground mineral extraction
[NASA-CASE-NFO-14140-1] c31 N78-24387
- Underground mineral extraction
[NASA-CASE-NPO-14140-1] c43 N81-26509
- MINERAL METABOLISM**
- Method and system for in vivo measurement of bone tissue using a two level energy source
[NASA-CASE-MSC-14276-1] c52 N77-14737

MINIATURE ELECTRONIC EQUIPMENT

Miniature solid state, direction sensitive, stress transducer design with bonded semiconductive piezoresistive element for sensing residual stresses
[NASA-CASE-XNP-02983] c14 N71-21091

Transducer circuit design with single coaxial cable for input and output connections including incorporation into miniaturized catheter transducer
[NASA-CASE-ARC-10132-1] c09 N71-24597

Solid state television camera system consisting of monolithic semiconductor mosaic sensor and molecular digital readout systems
[NASA-CASE-XNP-06092] c07 N71-24612

Miniature ingestible telemeter devices to measure deep-body temperature
[NASA-CASE-ARC-10563-1] c52 N76-25894

Miniature biaxial strain transducer
[NASA-CASE-LAR-11648-1] c35 N77-14407

MINIATURIZATION

Miniature vibration isolator utilizing elastic tubing material
[NASA-CASE-XLA-01019] c15 N70-40156

Computer circuit performing both counting and shifting logic operations also capable of miniaturization and integration in basic circuits
[NASA-CASE-XNP-01753] c08 N71-22897

Fast response miniature carbon dioxide detector with no moving parts for measuring concentration in any atmosphere
[NASA-CASE-MS-C-13332-1] c14 N72-21408

Magnetometer with a miniature transducer and automatic scanning
[NASA-CASE-LAR-11617-2] c35 N78-32397

Miniature cyclotron resonance ion source using small permanent magnet
[NASA-CASE-NPO-14324-1] c72 N80-27163

MINING

Underground mineral extraction
[NASA-CASE-NPO-14140-1] c31 N78-24387

Coal-shale interface detection system
[NASA-CASE-MFS-23720-2] c43 N80-14423

Coal-shale interface detector
[NASA-CASE-MFS-23720-1] c43 N80-23711

Underground mineral extraction
[NASA-CASE-NPO-14140-1] c43 N81-26509

MIRRORS

Pneumatic control of telescopic mirror support system
[NASA-CASE-XLA-03271] c11 N69-24321

Oscillatory electromagnetic mirror drive system for horizon scanners
[NASA-CASE-XLA-03724] c14 N69-27461

Servo system for retroreflector of Michelson interferometer
[NASA-CASE-NPO-10300] c14 N71-17662

Gas laser frequency stabilized by position of mirrors in resonant cavity
[NASA-CASE-XGS-03644] c16 N71-18614

Highly stable optical mirror assembly optimizing image quality of light diffraction patterns
[NASA-CASE-ERC-10001] c23 N71-24668

Adjustable rigid mount for trihedral mirror formed of alloy with small coefficient of thermal expansion supporting screws and spring-biased plates
[NASA-CASE-XNP-08907] c23 N71-29123

Optical range finder using reflective first surfaces mirror and transmitting beam splitter
[NASA-CASE-MS-C-12105-1] c14 N72-21409

Optical mirror support system
[NASA-CASE-XER-07896-2] c23 N72-22673

Strain gauge ambiguity sensor for segmented mirror active optical system
[NASA-CASE-MFS-20506-1] c35 N75-12273

Method for manufacturing mirrors in zero gravity environment
[NASA-CASE-MS-C-12611-1] c12 N76-15189

Method of and means for testing a glancing-incidence mirror system of an X-ray telescope
[NASA-CASE-MFS-22409-2] c74 N78-15880

Interferometer mirror tilt correcting system
[NASA-CASE-NPO-13687-1] c35 N78-18391

Anastigmatic three-mirror telescope
[NASA-CASE-MFS-23675-1] c89 N79-10969

MIS (SEMICONDUCTORS)

Photocapacitive image converter
[NASA-CASE-LAR-12513-1] c33 N80-28635

MISSILE CONTROL

Turnstile slot antenna
[NASA-CASE-GSC-11428-1] c32 N74-20864

MISSILE LAUNCHERS

Launch pad missile release system with bending moment change rate reduction in thrust distribution structure at liftoff
[NASA-CASE-XNP-03198] c30 N70-40353

Optical monitor panel consisting of translucent screen with test or meter information projected onto it from rear for application in control rooms of missile launching and tracking stations
[NASA-CASE-XKS-03509] c14 N71-23175

Controlled release device for use in launching rockets or missiles
[NASA-CASE-XKS-03338] c15 N71-24043

MISSILES

Hypersonic airbreathing missile
[NASA-CASE-LAR-12264-1] c15 N78-32168

Fire protection covering for small diameter missiles
[NASA-CASE-ARC-11104-1] c15 N79-26100

MITOSIS

Process for control of cell division
[NASA-CASE-LAR-10773-3] c51 N77-25769

MIXERS

Variable mixer propulsion cycle
[NASA-CASE-LEW-12917-1] c07 N78-18067

MIXING CIRCUITS

Varactor microwave frequency mixing circuit
[NASA-CASE-XGS-02171] c09 N69-24324

Microwave waveguide mixer
[NASA-CASE-ERC-10179] c07 N72-20141

MIXTURES

Low gravity phase separator
[NASA-CASE-MS-C-14773-1] c35 N78-12390

MOBILITY

Traveling wave solid state amplifier utilizing a semiconductor with negative differential mobility
[NASA-CASE-HQN-10069] c33 N75-27251

Mobile sampler for use in acquiring samples of terrestrial atmospheric gasses
[NASA-CASE-NFO-15220-1] c35 N81-24414

MODE TRANSFORMERS

Silicon controlled rectifier inverter with compensation of transients to avoid false gating
[NASA-CASE-XLA-08507] c09 N69-39984

Dual waveguide mode source for controlling amplitudes of two modes
[NASA-CASE-XNP-03134] c07 N71-10676

Direct current transformer
[NASA-CASE-MFS-29659-1] c33 N79-17133

MODEMS

Charge storage diode modulators and demodulators
[NASA-CASE-NFO-10189-1] c33 N77-21314

MODULATION

Demodulator for carrier transducers
[NASA-CASE-NUC-10107-1] c33 N74-17930

MODULATORS

Fabry-Perot interferometer retrodirective reflector modulator for optical communication
[NASA-CASE-XGS-04480] c16 N69-27491

Optical retrodirective modulator with focus spoiling reflector driven by modulation signal
[NASA-CASE-GSC-10062] c14 N71-15605

Calibrator for measuring and modulating or demodulating laser outputs
[NASA-CASE-XLA-03410] c16 N71-25914

Full wave modulator-demodulator amplifier apparatus --- for generating rectified output signal
[NASA-CASE-FRC-10072-1] c33 N74-14939

Charge storage diode modulators and demodulators
[NASA-CASE-NFO-10189-1] c33 N77-21314

Coherently pulsed laser source
[NASA-CASE-NFO-15111-1] c36 N80-24602

MODULES

Biorthogonal encoder with modular design
[NASA-CASE-NPO-10629] c08 N72-18184

Solar cell module assembly jig
[NASA-CASE-XGS-00829-1] c44 N79-19447

Method of fabricating a photovoltaic module of a substantially transparent construction
[NASA-CASE-NFO-14303-1] c44 N80-18550

MODULUS OF ELASTICITY

Fully plasma-sprayed compliant backed ceramic turbine seal
[NASA-CASE-LEW-13268-1] c37 N80-24619

MOISTURE

Gas purged dry box glove reducing permeation of air or moisture into dry box or isolator by diffusion through glove
[NASA-CASE-XLE-02531] c05 N71-23080

MOISTURE METERS

Method of evaluating moisture barrier properties of materials used in electronics encapsulation
[NASA-CASE-NPO-10051] c18 N71-24934

MOLDING MATERIALS

Vacuum method for molding thermosetting compounds used as ablative materials
[NASA-CASE-XLA-01091] c15 N71-10672

Method of making molded electric connector for use with flat conductor cables
[NASA-CASE-XNP-03498] c15 N71-15986

Hydraulic apparatus for casting and molding of liquid polymers
[NASA-CASE-XNP-07659] c06 N71-22975

Cold metal hydroforming techniques using epoxy molds for counteracting creep or stretch
[NASA-CASE-XLE-05641-1] c15 N71-26346

Molding process for imidazopyrrolone polymers
[NASA-CASE-LAR-10547-1] c31 N74-13177

Evacuated displacement compression molding
[NASA-CASE-LAR-10782-1] c31 N74-14133

Molded composite pyrogen igniter for rocket motors --- solid propellant ignition
[NASA-CASE-LAR-12018-1] c20 N78-24275

Method of making a rocket nozzle
[NASA-CASE-XNP-06884-1] c20 N79-21123

MOLDS

Forming mold for polishing and machining curved solar magnesium reflector with reinforcing ribs
[NASA-CASE-XLE-08917-2] c15 N71-24836

Using molds for fabricating individual fluid circuit components
[NASA-CASE-XLA-07829] c15 N72-16329

Evacuated displacement compression molding
[NASA-CASE-LAR-10782-1] c31 N74-14133

Molding apparatus --- for thermosetting plastic compositions
[NASA-CASE-LAR-10489-2] c31 N74-32920

Evacuated, displacement compression mold --- of tubular bodies from thermosetting plastics
[NASA-CASE-LAR-10782-2] c31 N75-13111

Method of making an apertured casting --- using duplicate mold
[NASA-CASE-LEW-11169-1] c37 N76-23570

MOLECULAR BEAMS

Selector mechanism for mechanical separation and discrimination of high velocity molecular particles
[NASA-CASE-XLE-01533] c11 N71-10777

Sputtering holes with ion beamlets
[NASA-CASE-LEW-11646-1] c20 N74-31269

MOLECULAR CHAINS

Viscoelastic cationic polymers containing the urethane linkage
[NASA-CASE-NPO-10830-1] c27 N81-15104

MOLECULAR GASES

Compact hydrogenator
[NASA-CASE-NPO-11682-1] c35 N74-15127

MOLECULAR PUMPS

Omnidirectional anisotropic molecular trap, used with vacuum pump to simulate space environments for testing spacecraft components
[NASA-CASE-XGS-00783] c30 N71-17788

Liquid-vapor interface seal design for turbine rotating shafts including helical and molecular pumps and liquid cooling of mercury vapor
[NASA-CASE-XNP-02862-1] c15 N71-26294

MOLECULAR RELAXATION

Double-beam optical method and apparatus for measuring thermal diffusivity and other molecular dynamic processes in utilizing the transient thermal lens effect
[NASA-CASE-NPO-14657-1] c74 N81-17887

MOLECULAR ROTATION

Diatomic infrared gasdynamic laser --- for producing different wavelengths
[NASA-CASE-ARC-10370-1] c36 N75-31426

MOLECULAR SPECTROSCOPY

Microwave double resonance spectroscopy

absorption cell for gas analysis
[NASA-CASE-LAR-10305] c14 N71-26137

MOLECULES

Stabilization of He2(a 3 Sigma u+ molecules in liquid helium by optical pumping for vacuum UV laser 6
[NASA-CASE-NFO-13993-1] c72 N79-13826

MOLTEN SALT ELECTROLYTES

Operation method for combined electrolysis device and fuel cell using molten salt to produce power by thermoelectric regeneration mechanism
[NASA-CASE-XLE-01645] c03 N71-20904

Zinc-halide battery with molten electrolyte
[NASA-CASE-NFO-11961-1] c44 N76-18643

MOLTEN SALTS

Molten salt pyrolysis of latex --- synthetic hydrocarbon fuel production using the Guayule shrub
[NASA-CASE-NFO-14315-1] c27 N81-17261

MOLYBDENUM

Thermocouples of molybdenum and iridium alloys for more stable vacuum-high temperature performance
[NASA-CASE-LEW-12174-2] c35 N79-14346

MOLYBDENUM CARBIDES

Flame or plasma spraying for molybdenum coating of carbon or graphite surfaces to prevent oxidative corrosion
[NASA-CASE-XLA-00302] c15 N71-16077

MOLYBDENUM DISULFIDES

Atomic hydrogen storage method and apparatus
[NASA-CASE-LEW-12081-3] c28 N81-14103

MOMENTS OF INERTIA

Test fixture for measuring moment of inertia of irregularly shaped body with multiple axes
[NASA-CASE-XGS-01023] c14 N71-22992

MOMENTUM

Utilization of momentum devices for forming attitude control and damping system for spacecraft
[NASA-CASE-XLA-02551] c21 N71-21708

Momentum-velocity analyzer for measuring minute space particles
[NASA-CASE-XMS-04201] c14 N71-22990

MONATOMIC GASES

Atomic hydrogen storage --- cryotrapping and magnetic field strength
[NASA-CASE-LEW-12081-2] c28 N80-20402

MONITORS

Fluid leakage detection system with automatic monitoring capability
[NASA-CASE-LAR-10323-1] c12 N71-17573

Monitoring circuit design for sampling circuit control and reduction of time-bandwidth in video communication systems
[NASA-CASE-XNP-02791] c07 N71-23026

Optical monitor panel consisting of translucent screen with test or meter information projected onto it from rear for application in control rooms of missile launching and tracking stations
[NASA-CASE-XKS-03509] c14 N71-23175

Peak polarity selector for monitoring waveforms
[NASA-CASE-FRC-10010] c10 N71-24862

Circuit for monitoring power supply by ripple current indication
[NASA-CASE-KSC-10162] c09 N72-11225

Development of droplet monitoring probe for use in analysis of droplet propagation in mixed-phase fluid stream
[NASA-CASE-NPO-10985] c14 N73-20478

Monitoring and recording lightning strokes in predetermined area
[NASA-CASE-KSC-10728-1] c14 N73-32319

Method and apparatus for optically monitoring the angular position of a rotating mirror
[NASA-CASE-GSC-11353-1] c74 N74-21304

Remote lightning monitor system
[NASA-CASE-KSC-11031-1] c33 N79-11315

Apparatus including a plurality of spaced transformers for locating short circuits in cables
[NASA-CASE-KSC-10899-1] c33 N79-18193

Intrusion detection method and apparatus --- monitoring unwanted subterranean entry and departure
[NASA-CASE-ARC-11317-1] c35 N81-19430

- Indirect microbial detection
[NASA-CASE-LAR-12520-1] c51 N81-28698
- MONOCHROMATIC RADIATION**
Apparatus for producing monochromatic light from continuous plasma source
[NASA-CASE-XNP-04167-2] c25 N72-24753
Laser extensometer
[NASA-CASE-MFS-19259-1] c36 N76-14380
Multiprism collimator
[NASA-CASE-GSC-12608-1] c35 N81-12387
- MONOCHROMATORS**
Analytical photoionization mass spectrometer with argon gas filter between light source and monochromator
[NASA-CASE-LAR-10180-1] c06 N71-13461
Color television system for allowing monochrome television camera to produce color pictures
[NASA-CASE-MSC-12146-1] c07 N72-17109
- MONOMERS**
Pressure transducer --- using a monomeric charge transfer complex sensor
[NASA-CASE-NPO-11150] c35 N78-17359
Bifunctional monomers having terminal oxime and cyano or amidine groups
[NASA-CASE-ARC-11253-3] c27 N81-24256
Cross-linked polyvinyl alcohol and method of making same
[NASA-CASE-LEW-13101-2] c23 N81-29160
Phosphorus-containing imide resins
[NASA-CASE-ARC-11368-1] c27 N81-31364
- MONOPOLE ANTENNAS**
Monopole antenna system for maximum omnidirectional efficiency for use on satellites
[NASA-CASE-XLA-00414] c07 N70-38200
Flexible monopole antenna with broad bandwidth and low voltage standing wave ratio
[NASA-CASE-MSC-12101] c09 N71-18720
- MONOPROPELLANTS**
Ignition system for monopropellant combustion devices
[NASA-CASE-XNP-00249] c28 N70-38249
Catalyst bed ignition system for hydrazine propellants
[NASA-CASE-XNP-00876] c28 N70-41311
Low thrust monopropellant engine --- low temperature environments
[NASA-CASE-GSC-12194-2] c20 N79-15151
- MONOPULSE ANTENNAS**
Electronic and mechanical scanning control system for monopulse tracking antenna
[NASA-CASE-IGS-05582] c07 N69-27460
Development and characteristics of low-noise multimode monopulse antenna feed system for use with microwave communication equipment
[NASA-CASE-XNP-01735] c07 N71-22750
Monopulse scanning network for scanning volumetric antenna pattern
[NASA-CASE-GSC-10299-1] c09 N71-24804
Switchable beamwidth monopulse method and system
[NASA-CASE-GSC-11924-1] c33 N76-27472
- MONOPULSE RADAR**
Polarization diversity monopulse tracking receiver design without radio frequency switches
[NASA-CASE-IGS-03501] c09 N71-20864
Monopulse tracking system with antenna array of three radiators for deriving azimuth and elevation indications
[NASA-CASE-IGS-01155] c10 N71-21483
- MONOSTABLE MULTIVIBRATORS**
Development and characteristics of resettable monostable pulse generator with charge rundown-timing circuit
[NASA-CASE-GSC-11139] c09 N71-27016
Monostable multivibrator for producing output pulse widths with positive feedback NOR gates
[NASA-CASE-MSC-13492-1] c10 N71-28660
- MOSSBAUER EFFECT**
Mossbauer spectrometer radiation detector
[NASA-CASE-LAR-11155-1] c35 N74-15091
Method and apparatus for vibration analysis utilizing the Mossbauer effect
[NASA-CASE-XNP-05882] c35 N75-27329
- MOTION**
Quick attach mechanism for moving or stationary wires, ropes, or cables
[NASA-CASE-XPR-05421] c15 N71-22994
- MOTION PICTURES**
Real time moving scene holographic camera system
[NASA-CASE-MFS-21087-1] c35 N74-17153
- Real time, large volume, moving scene holographic camera system
[NASA-CASE-MFS-22537-1] c35 N75-27328
- MOTION SIMULATORS**
Kinesthetic control simulator --- for pilot training
[NASA-CASE-LAR-10276-1] c09 N75-15662
Helmet weight simulator
[NASA-CASE-LAR-12320-1] c54 N81-27806
- MOTION STABILITY**
Hydraulic drive mechanism for leveling isolation platforms
[NASA-CASE-XMS-03252] c15 N71-10658
- MOTORS**
Nonmagnetic thermal motor for magnetometer movement
[NASA-CASE-XAR-03786] c09 N69-21313
System for maintaining motor at predetermined speed using digital pulses
[NASA-CASE-XNP-06892] c09 N71-24805
Mechanical thermal motor
[NASA-CASE-MFS-23062-1] c37 N77-12402
Redundant motor drive system
[NASA-CASE-MFS-23777-1] c37 N80-32716
- MOUNTING**
Mounting fixture for supporting thermobulb in pipeline
[NASA-CASE-NPO-10158] c33 N71-16356
Mounting apparatus for temperature control system
[NASA-CASE-NPO-10138] c33 N71-16357
Inertial component clamping assembly design for spacecraft guidance and control system mounting
[NASA-CASE-XMS-02184] c15 N71-20813
Techniques for packaging and mounting printed circuit boards
[NASA-CASE-MFS-21919-1] c10 N73-25243
Lubricated journal bearing
[NASA-CASE-LEW-11076-3] c37 N75-30562
Translatory shock absorber for attitude sensors
[NASA-CASE-MFS-22905-1] c19 N76-22284
Deformable bearing seat
[NASA-CASE-LEW-12527-1] c37 N77-32500
Impact absorbing blade mounts for variable pitch blades
[NASA-CASE-LEW-12313-1] c37 N78-10468
Attaching of strain gages to substrates
[NASA-CASE-FRC-10093-1] c35 N80-20560
Unidirectional flexural pivot
[NASA-CASE-GSC-12622-1] c37 N81-22359
- MOVING TARGET INDICATORS**
Automatic vehicle location system
[NASA-CASE-NPO-11850-1] c32 N74-12912
Interferometric locating system
[NASA-CASE-NPO-14173-1] c04 N80-32359
- MULTICHANNEL COMMUNICATION**
Tape guidance system for multichannel digital recording system
[NASA-CASE-XNP-09453] c08 N71-19420
Plural channel data transmission system with quadrature modulation and complementary demodulation
[NASA-CASE-XAC-06302] c08 N71-19763
Improved phase lock loop for receiver in multichannel telemetry system with suppressed carrier
[NASA-CASE-NPO-11593-1] c07 N73-28012
Miniature multichannel biotelemetry system
[NASA-CASE-NPO-13065-1] c52 N74-26625
Medical subject monitoring systems --- multichannel monitoring systems
[NASA-CASE-MSC-14180-1] c52 N76-14757
Multi-channel rotating optical interface for data transmission
[NASA-CASE-NPO-14066-1] c74 N79-34011
- MULTILAYER INSULATION**
Electrode sealing and insulation for fuel cells containing caustic liquid electrolytes using powdered plastic and metal
[NASA-CASE-XMS-01625] c15 N71-23022
Multilayer insulation panels for cryogenic liquid containers
[NASA-CASE-MFS-14023] c33 N71-25351
Electrical failure detector in solid rocket propellant motor insulation against thermal degradation by fuel grain
[NASA-CASE-XNP-03968] c14 N71-27186
Method of making an insulation foil
[NASA-CASE-LEW-11484-1] c24 N75-33181

Multivall thermal protection system
[NASA-CASE-LAR-12620-1] c24 N80-12117

Process for preparing high temperature polyimide film laminates
[NASA-CASE-LAR-12742-1] c24 N81-12174

MULTIFACTOR DISCHARGES
High power RF coaxial switch
[NASA-CASE-NPO-14229-1] c33 N80-18285

MULTIPATH TRANSMISSION
Anti-multipath digital signal detector
[NASA-CASE-LAR-11827-1] c32 N77-10392
Large volume multiple path nuclear pumped laser
[NASA-CASE-LAR-12592-1] c36 N79-26385

MULTIPLE BEAM INTERVAL SCANNERS
Tracking antenna system with array for synchronous satellite or ground based radar
[NASA-CASE-GSC-10553-1] c07 N71-19654
Variable beamwidth antenna --- with multiple beam, variable feed system
[NASA-CASE-GSC-11862-1] c32 N76-18295

MULTIPLE DOCKING ADAPTERS
Probe and drogue assembly for mechanical linking of two space vehicles
[NASA-CASE-XMS-03613] c31 N71-16346

MULTIPLE OUTPUT PROGRAMS
Multi-computer multiple data path hardware exchange system
[NASA-CASE-NPO-13422-1] c60 N76-14618

MULTIPLEXING
Doppler frequency shift correction device for multiplex communication with Applications Technology Satellites
[NASA-CASE-XGS-02749] c07 N69-39578
Multiplexed communication system design including automatic correction of transmission errors introduced by frequency spectrum shifts
[NASA-CASE-XNP-01306] c07 N71-20814
Satellite network synchronization system with multiple access to multiplex repeater
[NASA-CASE-GSC-10390-1] c07 N72-11149
Apparatus with summing network for compression of analog data by decreasing slope threshold sampling
[NASA-CASE-NPO-10769] c08 N72-11171
Development and characteristics of data multiplexer circuit using field effect transistors arranged in tree switching configuration
[NASA-CASE-NPO-11333] c08 N72-22162
Television multiplexing system, using single crystal controlled clock for signal synchronization
[NASA-CASE-KSC-10654-1] c07 N73-30115
Asynchronous, multiplexing, single line transmission and recovery data system --- for satellite use
[NASA-CASE-NPO-13321-1] c32 N75-26195
Correlation type phase detector --- with time correlation integrator for frequency multiplexed signals
[NASA-CASE-GSC-11744-1] c33 N75-26243
System for producing chroma signals
[NASA-CASE-MSC-14683-1] c74 N77-18893
Fiber optic multiplex optical transmission system
[NASA-CASE-KSC-11047-1] c74 N78-14889
Multi-channel temperature measurement amplification system
[NASA-CASE-NPS-23775-1] c35 N80-17421
System for a displaying at a remote station data generated at a central station and for powering the remote station from the central station
[NASA-CASE-GSC-12411-1] c33 N81-14221
Multifrequency broadband polarized horn antenna
[NASA-CASE-NPO-14588-1] c32 N81-25278
High-speed multiplexing of keyboard data inputs
[NASA-CASE-NPO-14554-1] c60 N81-27814

MULTIPLIERS
Pulse duration modulation multiplier system
[NASA-CASE-XER-09213] c07 N71-12390
Design and development of variable pulse width multiplier
[NASA-CASE-XLA-02850] c09 N71-20447
Capacitance multiplier and filter synthesizing network
[NASA-CASE-NPO-11948-1] c33 N74-32712
Regulated high efficiency, lightweight capacitor-diode multiplier dc to dc converter
[NASA-CASE-LEW-12791-1] c33 N78-32341

MULTISPECTRAL BAND SCANNERS

Optical process for producing classification maps from multispectral data
[NASA-CASE-MSC-14472-1] c43 N77-10584

Interactive color display for multispectral imagery using correlation clustering
[NASA-CASE-MSC-16253-1] c32 N79-20297

Multispectral scanner optical system
[NASA-CASE-MSC-18255-1] c74 N80-33210

Medical diagnosis system and method with multispectral imaging --- depth of burns and optical density of the skin
[NASA-CASE-NFO-14402-1] c52 N81-27783

MULTISPECTRAL LINEAR ARRAYS
Time delay and integration detectors using charge transfer devices
[NASA-CASE-GSC-12324-1] c33 N81-33403

MULTISPECTRAL PHOTOGRAPHY
Computerized optical system for producing multiple images of a scene simultaneously
[NASA-CASE-MSC-12404-1] c23 N73-13661
Optical process for producing classification maps from multispectral data
[NASA-CASE-MSC-14472-1] c43 N77-10584
Multispectral imaging and analysis system --- using charge coupled devices and linear arrays
[NASA-CASE-NFO-13691-1] c43 N79-17288
Interactive color display for multispectral imagery using correlation clustering
[NASA-CASE-MSC-16253-1] c32 N79-20297

MULTISTAGE ROCKET VEHICLES
Techniques for recovery of multistage rocket vehicles by providing lifting surfaces on individual sections
[NASA-CASE-XNP-00389] c31 N70-34176
Steerable solid propellant rocket motor adapted to effect payload orientation as multistage rocket stage or reduce velocity as retrorocket
[NASA-CASE-XNP-00234] c28 N70-38645
Multi-mission space vehicle module stage design
[NASA-CASE-XNP-01543] c31 N71-17730
Separation mechanism for use between stages of multistage rocket vehicles
[NASA-CASE-XLA-00188] c15 N71-22874
Development of remotely controlled shaped charge for lateral displacement of rocket stages after separation
[NASA-CASE-XLA-04804] c31 N71-23008
Frangible connecting link suitable for rocket stage separation
[NASA-CASE-MSC-11849-1] c15 N72-22488

MULTIVIBRATORS
Extra-long monostable multivibrator employing bistable semiconductor switch to allow charging of timing circuit
[NASA-CASE-XGS-00381] c09 N70-34819
Variable frequency magnetic coupled multivibrator with temperature compensated frequency control circuit
[NASA-CASE-XGS-00458] c09 N70-38604
Variable frequency magnetic coupled multivibrator with output signal of constant amplitude and waveform
[NASA-CASE-XGS-00131] c09 N70-38995
Improved semiconductor multivibrator circuit which approaches 100 percent efficiency
[NASA-CASE-XAC-00942] c10 N71-16042
Transistorized dc-coupled multivibrator with noninverted output signal
[NASA-CASE-INP-09450] c10 N71-18723
One shot multivibrator circuit for producing long duration output pulses
[NASA-CASE-ARC-10137-1] c09 N71-28468

MUSCLES
Subminiature insertable force transducer --- including a strain gage to measure forces in muscles
[NASA-CASE-NFO-13423-1] c33 N75-31329
Multifunctional transducer
[NASA-CASE-NFO-14329-1] c52 N81-20703

MUSCULAR FUNCTION
Miniature muscle displacement transducer
[NASA-CASE-NFO-13519-1] c33 N76-19338
Simultaneous muscle force and displacement transducer
[NASA-CASE-NFO-14212-1] c52 N80-27072

MUSCULOSKELETAL SYSTEM
Method and apparatus for applying compressional forces to skeletal structure of subject to

simulate force during ambulatory conditions
[NASA-CASE-ARC-10100-1] c05 N71-24738

MYOCARDIUM

Myocardium wall thickness transducer and measuring method
[NASA-CASE-NPO-13644-1] c52 N76-25695
Simultaneous muscle force and displacement transducer
[NASA-CASE-NPO-14212-1] c52 N80-27072

N**N-TYPE SEMICONDUCTORS**

Complementary DMOS-VMOS integrated circuit structure
[NASA-CASE-GSC-12190-1] c33 N79-12321
Schottky barrier cell and method of fabricating it
[NASA-CASE-NPO-13689-4] c44 N81-26553

NACELLES

Deflector for preventing objects from entering nacelle inlets of jet aircraft
[NASA-CASE-XLE-00388] c28 N70-34788
Afterburner-equipped jet engine nacelle with slotted configuration afterbody
[NASA-CASE-XLA-10450] c28 N71-21493
Integrated gas turbine engine nacelle
[NASA-CASE-LEW-12389-2] c07 N78-18066
Integrated gas turbine engine nacelle
[NASA-CASE-LEW-12389-3] c07 N79-14096

NASA PROGRAMS

Retractable environmental seal
[NASA-CASE-MFS-23646-1] c37 N79-22474

NAVIGATION

A system for providing an integrated display of instantaneous information relative to aircraft attitude, heading, altitude, and horizontal situation
[NASA-CASE-FRC-11005-1] c06 N79-24988
Navigation system and method
[NASA-CASE-GSC-12508-1] c04 N81-26085

NAVIGATION AIDS

Magnetic heading reference
[NASA-CASE-LAR-11387-1] c04 N76-20114
Ruler for making navigational computations
[NASA-CASE-XNP-01458] c04 N78-17031
Low-frequency radio navigation system
[NASA-CASE-NPO-15264-1] c04 N81-22036

NAVIGATION INSTRUMENTS

Sun angle calculator
[NASA-CASE-MSC-12617-1] c35 N76-29552

NAVIGATION SATELLITES

Satellite aided aircraft collision avoidance system effective for large number of aircraft
[NASA-CASE-ERC-10090] c21 N71-24948

NEAR INFRARED RADIATION

Collimator for analyzing spatial location of near and distant sources of radiation
[NASA-CASE-MFS-20546-2] c14 N73-30389

NEGATIVE FEEDBACK

Complementary regenerative transistorized switch circuit employing positive and negative feedback
[NASA-CASE-XGS-02751] c09 N71-23015
Solid-state current transformer
[NASA-CASE-MFS-22560-1] c33 N77-14335

NEODYMIUM LASERS

Length controlled stabilized mode-lock Nd:YAG laser
[NASA-CASE-GSC-11571-1] c36 N77-25499

NETWORK SYNTHESIS

Left and right hand circular electromagnetic polarization excitation by phase shifter and hybrid networks
[NASA-CASE-GSC-10021-1] c09 N71-24595
High speed phase detector design indicating phase relationship between two square wave input signals
[NASA-CASE-XNP-01306-2] c09 N71-24596

NEUROGLIA

Percutaneous connector device
[NASA-CASE-KSC-10849-1] c52 N77-14738

NEUROLOGY

An implantable electrical device
[NASA-CASE-GSC-12560-1] c52 N80-27073

NEUTRALIZERS

Method and apparatus for neutralizing potentials induced on spacecraft surfaces
[NASA-CASE-GSC-11963-1] c33 N77-10429

NEUTRON EMISSION

Deuterium pass through target --- neutron

emitting target
[NASA-CASE-LEW-11866-1] c72 N76-15860

NICKEL

Process for producing dispersion strengthened nickel with aluminum comprising metallic matrices embedded with oxides or other hyperfine compounds
[NASA-CASE-XLE-06969] c17 N71-24142
Selective nickel deposition on irradiation sensitive compounds
[NASA-CASE-LEW-10965-1] c15 N72-25452
Brazing alloy composition
[NASA-CASE-XNP-06053] c26 N75-27126
Method of making reinforced composite structure
[NASA-CASE-LEW-12619-1] c24 N77-19171
Directionally solidified eutectic gamma-gamma nickel-base superalloys
[NASA-CASE-LEW-12905-1] c26 N78-18183

NICKEL ALLOYS

Preparation of nickel alloys for jet turbine blades operating at high temperatures
[NASA-CASE-XLE-00151] c17 N70-33283
Nickel alloy series for aerospace structures subjected to high temperatures
[NASA-CASE-XLE-00283] c17 N70-36616
Nickel base alloy with resistance to oxidation at high temperatures and superior stress-rupture properties
[NASA-CASE-XLE-02082] c17 N71-16026
High strength nickel based alloys
[NASA-CASE-LEW-10874-1] c17 N72-22535
Diffusion welding --- heat treatment of nickel alloys following single step vacuum welding process
[NASA-CASE-LEW-11388-2] c37 N74-21055
Method of heat treating age-hardenable alloys
[NASA-CASE-XNP-01311] c26 N75-29236
Zirconium modified nickel-copper alloy
[NASA-CASE-LEW-12245-1] c26 N77-20201
Directionally solidified eutectic gamma plus beta nickel-base superalloys
[NASA-CASE-LEW-12906-1] c26 N77-32279
Nickel base alloy --- for gas turbine engine stator vanes
[NASA-CASE-LEW-12270-1] c26 N77-32280
NiCrAl ternary alloy having improved cyclic oxidation resistance
[NASA-CASE-LEW-13339-1] c26 N81-12211

NICKEL CADMIUM BATTERIES

Heat flow calorimeter --- measures output of Ni-Cd batteries
[NASA-CASE-GSC-11434-1] c34 N74-27859
Method and apparatus for conditioning of nickel-cadmium batteries
[NASA-CASE-MFS-23270-1] c44 N78-25531

NICKEL COATINGS

Intermetallic chromium containing nickel aluminide for high temperature corrosion protection of stainless steels
[NASA-CASE-LEW-11267-1] c17 N73-32414
Selective coating for solar panels --- using black chrome and black nickel
[NASA-CASE-LEW-12159-1] c44 N78-19599

NICKEL COMPOUNDS

Including didymium hydrate in nickel hydroxide of positive electrode of storage batteries to increase ampere hour capacity
[NASA-CASE-XGS-03505] c03 N71-10608
Brazing alloy
[NASA-CASE-XNP-03878] c26 N75-27127

NICKEL FLATE

Nickel plating onto etched aluminum castings
[NASA-CASE-XNP-04148] c17 N71-24830

NICKEL ZINC BATTERIES

Additive for zinc electrodes
[NASA-CASE-LEW-13286-1] c44 N81-27597

NIOBIUM

Organometallic compounds of niobium and tantalum useful for film deposition
[NASA-CASE-XNP-04023] c06 N71-28808

NITRAMINE PROPELLANTS

Nitramine propellants --- gun propellant burning rate
[NASA-CASE-NFO-14103-1] c28 N78-31255

NITRATES

Method of forming dynamic membrane on stainless steel support
[NASA-CASE-MSC-18172-1] c26 N80-19237

NITRIC OXIDE

Reduction of nitric oxide emissions from a combustor
[NASA-CASE-ARC-10814-2] c07 N80-26298

NITRILES

Intumescent paint containing nitrile rubber for fire protection
[NASA-CASE-ARC-10196-1] c18 N73-13562
Trimerization of aromatic nitriles
[NASA-CASE-LEW-12053-1] c27 N78-15276
Preparation of perfluorinated imidoylasidoximes --- for eventual preparation of heat and chemical resistant polymers
[NASA-CASE-ARC-11267-1] c23 N80-26386

NITRO COMPOUNDS

Intumescent coatings containing 4,4'-dinitrosulfanilide
[NASA-CASE-ARC-11042-1] c24 N78-14696

NITROAMINES

Nitroaniline sulfate, intumescent paints
[NASA-CASE-ARC-10699-1] c18 N71-15469
Mercaptan terminated polymer containing sulfonic acid salts of nitrosubstituted aromatic amines for heat and moisture resistant coatings
[NASA-CASE-ARC-10325] c06 N72-25147

NITROGEN

III-V photocathode with nitrogen doping for increased quantum efficiency
[NASA-CASE-NPO-12134-1] c33 N76-31409

NITROGEN COMPOUNDS

Method for preparing addition type polyimide prepreps
[NASA-CASE-LAR-12054-2] c27 N81-14078

NITROGEN OXIDES

Combustion engine --- for air pollution control
[NASA-CASE-NPO-13671-1] c37 N77-31497
Combustor --- low nitrogen oxide formation
[NASA-CASE-NPO-13958-1] c25 N79-11151

NITROGEN TETROXIDE

Gas chromatographic method for determining water in nitrogen tetroxide rocket propellant
[NASA-CASE-NPO-10234] c06 N72-17094

NITROGUANIDINE

Solid propellant stabilizer containing nitroguanidine
[NASA-CASE-NPO-12000] c27 N72-25699

NOISE GENERATORS

Pseudo-noise test set for communication system evaluation --- test signals
[NASA-CASE-MPS-22671-1] c35 N75-21582
Method of and means for testing a tape record/playback system
[NASA-CASE-MPS-22671-2] c35 N77-17426

NOISE MEASUREMENT

Ride quality meter
[NASA-CASE-LAR-12882-1] c54 N81-31848

NOISE METERS

Instrumentation for measurement of aircraft noise and sonic boom
[NASA-CASE-LAR-11173-1] c35 N75-19614
Differential sound level meter
[NASA-CASE-LAR-12106-1] c71 N78-14867
Ride quality meter
[NASA-CASE-LAR-12882-1] c54 N81-31848

NOISE REDUCTION

Upper surface, external flow, jet-augmented flap configuration for high wing jet aircraft for noise reduction
[NASA-CASE-XLA-00087] c02 N70-33332
Cassegrain antenna subreflector flange for suppressing ground noise and increasing antenna transmitting efficiency
[NASA-CASE-XNP-00683] c09 N70-35425
Device for adding water to high velocity exhaust jets to reduce velocity, noise, and temperature
[NASA-CASE-XNP-01813] c28 N70-41582
Variable time constant, wide frequency range smoothing network for noise removal from pulse chains
[NASA-CASE-IGS-01983] c10 N70-41964
Digital telemetry system apparatus to reduce tape recorder wow and flutter noise during playback
[NASA-CASE-IGS-01812] c07 N71-23001
Audio signal processing system for noise surge elimination at low amplitude audio input
[NASA-CASE-MSC-12223-1] c07 N71-26181
Variable frequency nuclear magnetic resonance spectrometer providing drive signals over wide

frequency range and minimizing noise effects
[NASA-CASE-XNP-09830] c14 N71-26266
Noise elimination in coherent imaging system by axial rotation of optical lense for spectral distribution of degrading affects
[NASA-CASE-GSC-11133-1] c23 N72-11568
Audio equipment for removing impulse noise from audio signals
[NASA-CASE-NPO-11631] c10 N73-12244
Gas turbine exhaust nozzle --- for noise reduction
[NASA-CASE-LEW-11569-1] c07 N74-15453
Totally confined explosive welding --- apparatus to reduce noise level and protect personnel during explosive bonding
[NASA-CASE-LAR-10941-1] c37 N74-21057
Jet exhaust noise suppressor
[NASA-CASE-LEW-11286-1] c07 N74-27490
Supersonic fan blading --- noise reduction in turbofan engines
[NASA-CASE-LEW-11402-1] c07 N74-28226
Variably positioned guide vanes for aerodynamic choking
[NASA-CASE-LAR-10642-1] c07 N74-31270
Noise suppressor --- for turbofan engine by incorporating annular acoustically porous elements in exhaust and inlet ducts
[NASA-CASE-LAR-11141-1] c07 N74-32418
Abating exhaust noises in jet engines
[NASA-CASE-ARC-10712-1] c07 N74-33218
Television noise reduction device
[NASA-CASE-MSC-12607-1] c32 N75-21485
Cascade plug nozzle --- for jet noise reduction
[NASA-CASE-LAR-11674-1] c07 N76-18117
Noise suppressor for turbo fan jet engines
[NASA-CASE-ARC-10812-1] c07 N76-18131
Apparatus for reducing aerodynamic noise in a wind tunnel
[NASA-CASE-MPS-23099-1] c09 N76-23273
Optical noise suppression device and method --- laser light exposing film
[NASA-CASE-MSC-12640-1] c74 N76-31998
Variable thrust nozzle for quiet turbofan engine and method of operating same
[NASA-CASE-LEW-12317-1] c07 N78-17055
Magneto-optic detection system with noise cancellation
[NASA-CASE-NPO-11954-1] c35 N78-29421
Totally confined explosive welding
[NASA-CASE-LAR-10941-2] c37 N79-13364
Sound-suppressing structure with thermal relief
[NASA-CASE-LEW-12658-1] c71 N79-14871
Acoustically swept rotor --- helicopter noise reduction
[NASA-CASE-ARC-11106-1] c05 N80-14107
Multiple pure tone elimination strut assembly
[NASA-CASE-FRC-11062-1] c07 N80-32393
Support assembly for cryogenically coolable low-noise choke waveguide
[NASA-CASE-NPO-14253-1] c32 N80-32605
Curved centerline air intake for a gas turbine engine
[NASA-CASE-LEW-13201-1] c07 N81-14999
A rectangular rod-wall sound shield
[NASA-CASE-LAR-12883-1] c09 N81-29138

NOISE TEMPERATURE
Input radio frequency circuit for switching type absolute temperature measuring radiometer for noise sources
[NASA-CASE-FRC-11020] c14 N71-26774

NOISE THRESHOLD
Threshold extension device for improving operating performance of frequency modulation demodulators by eliminating click-type noise impulses
[NASA-CASE-MSC-12165-1] c07 N71-33696

NONADIABATIC CONDITIONS
Direct heating surface combustor
[NASA-CASE-LEW-11877-1] c34 N78-27357

NONDESTRUCTIVE TESTS
Nondestructive radiographic tests of resistance welds
[NASA-CASE-XNP-02588] c15 N71-18613
Space environment simulator for testing spacecraft components under aerospace conditions
[NASA-CASE-NPO-10141] c11 N71-24964
Apparatus for semiautomatic inspection of microfilmed documents for density, resolution, size, and position
[NASA-CASE-MPS-20240] c14 N71-26788

Dye penetrant and technique for nondestructive tests of solid surfaces contacted by liquid oxygen
[NASA-CASE-XMF-02221] c18 N71-27170

Method and photodetector device for locating abnormal voids in low density materials
[NASA-CASE-MFS-20044] c14 N71-28993

Holographic system for nondestructive testing
[NASA-CASE-MFS-21704-1] c35 N75-25124

Method and apparatus for nondestructive testing of pressure vessels
[NASA-CASE-NPO-12142-1] c38 N76-28563

Non-destructive method for applying and removing instrumentation on helicopter rotor blades
[NASA-CASE-LAR-11201-1] c35 N78-24515

Hybrid holographic non-destructive test system
[NASA-CASE-MFS-23114-1] c38 N78-32447

NON-EQUILIBRIUM CONDITIONS

Condition sensor system and method
[NASA-CASE-MSC-14805-1] c54 N78-32720

NON-EQUILIBRIUM PLASMAS

Plasma probes having guard ring and primary sensor at same potential to prevent stray wall current collection in ionized gases
[NASA-CASE-XLE-00690] c25 N69-39884

NON-EQUILIBRIUM RADIATION

Non-equilibrium radiation nuclear reactor
[NASA-CASE-HQN-10841-1] c73 N78-19920

NONFLAMMABLE MATERIALS

Intumescent paint containing nitrile rubber for fire protection
[NASA-CASE-ARC-10196-1] c18 N73-13562

Non-flammable elastomeric fiber from a fluorinated elastomer and containing an halogenated flame retardant
[NASA-CASE-MSC-14331-1] c27 N76-24405

NONLINEAR FEEDBACK

Coherent receiver employing nonlinear coherence detection for carrier tracking
[NASA-CASE-NPO-11921-1] c32 N74-30523

Nonlinear nonsingular feedback shift registers
[NASA-CASE-NPO-13451-1] c33 N76-14373

NONLINEAR SYSTEMS

Detector assembly for discriminating first signal with respect to presence or absence of second signal at time of occurrence of first signal
[NASA-CASE-XMF-00701] c09 N70-40272

Describing continuous analog to digital converter with parallel digital output and nonlinear feedback
[NASA-CASE-XAC-04031] c08 N71-18594

Split range transducer
[NASA-CASE-XLA-11189] c10 N72-20222

Contour measurement system
[NASA-CASE-MFS-23726-1] c43 N79-26439

NOSE CONES

Automatically deploying nozzle exit cone extension
[NASA-CASE-XLE-01640] c31 N71-15637

Nose cone mounted heat resistant antenna comprising plurality of adjacent layers of silica not introducing paths of high thermal conductivity through ablative shield
[NASA-CASE-XMS-04312] c07 N71-22984

NOSE WHEELS

Nose gear steering system for vehicles with main skids to provide directional stability after loss of aerodynamic control
[NASA-CASE-XLA-01804] c02 N70-34160

NOTCH STRENGTH

Active notch filter network with variable notch depth, width and frequency
[NASA-CASE-FRC-11055-1] c33 N80-29583

NOTCH TESTS

Vee-notching device --- with adjustable carriage
[NASA-CASE-MFS-20730-1] c39 N74-13131

Notch filter
[NASA-CASE-MFS-23303-1] c32 N77-18307

NOTCHES

Notch filter
[NASA-CASE-MFS-23303-1] c32 N77-18307

NOZZLE DESIGN

High thrust annular liquid propellant rocket engine and exhaust nozzle design
[NASA-CASE-XLE-00078] c28 N70-33284

Penshaped, supersonic exhaust nozzle design
[NASA-CASE-XLE-00057] c28 N70-38711

Telescoping-spike supersonic nozzle for turbojet or ramjet engines

[NASA-CASE-XLE-00005] c28 N70-39899

Automatically deploying nozzle exit cone extension
[NASA-CASE-XLE-01640] c31 N71-15637

Propellant injection assembly having individually removable and replaceable nozzles for liquid fueled rocket engines
[NASA-CASE-XMF-00968] c28 N71-15660

Development of collapsible nozzle extension for rocket engines
[NASA-CASE-MFS-11497] c28 N71-16224

Design and development of gas turbine combustion unit with nozzle guide vanes for introducing diluent air into combustion gases
[NASA-CASE-XLE-103477-1] c28 N71-20330

Prestressed rocket nozzle with ceramic inner rings and refractory metal outer rings
[NASA-CASE-XNP-02888] c18 N71-21068

Scanning nozzle plating system --- for etching or plating metals on substrates without masking
[NASA-CASE-NFO-11758-1] c31 N74-23065

Variable thrust nozzle for quiet turbofan engine and method of operating same
[NASA-CASE-LEW-12317-1] c07 N78-17055

Variable area exhaust nozzle
[NASA-CASE-LEW-12378-1] c07 N79-14097

Aircraft engine nozzle
[NASA-CASE-ARC-10977-1] c07 N80-32392

Sandblasting nozzle
[NASA-CASE-NFO-13823-1] c37 N81-25371

NOZZLE FLOW

System for aerodynamic control of rocket vehicles by secondary injection of fluid into nozzle exhaust stream
[NASA-CASE-XLA-01163] c21 N71-15582

Constructing fluid spike nozzle to eliminate heat transfer and high temperature problems inherent in physical spikes
[NASA-CASE-XGS-01143] c31 N71-15647

Electronic recording system for spatial mass distribution of liquid rocket propellant droplets or vapors ejected from high velocity nozzles
[NASA-CASE-NFO-10185] c10 N71-26339

Tertiary flow injection system for thrust vectoring of propulsive nozzle flow
[NASA-CASE-MFS-20831] c28 N71-29153

Multi-purpose wind tunnel reaction control model block
[NASA-CASE-MSC-19706-1] c09 N78-31129

NOZZLE GEOMETRY

Method of making a rocket nozzle
[NASA-CASE-XMF-06884-1] c20 N79-21123

NOZZLE INSERTS

Flexible rocket motor nozzle closure device to aid ignition and protect rocket chamber from foreign objects
[NASA-CASE-XLA-02651] c28 N70-41967

NUCLEAR DEVICES

Large volume multiple path nuclear pumped laser
[NASA-CASE-LAR-12592-1] c36 N79-26385

NUCLEAR EXPLOSION EFFECT

Development of method for protecting large and oddly shaped areas from radiant and convective heat
[NASA-CASE-XNP-01310] c33 N71-28852

NUCLEAR FUEL ELEMENTS

Tungsten-coated tungsten-uranium dioxide nuclear fuel plates
[NASA-CASE-XLE-00209] c22 N73-32528

NUCLEAR MAGNETIC RESONANCE

Variable frequency nuclear magnetic resonance spectrometer providing drive signals over wide frequency range and minimizing noise effects
[NASA-CASE-XNP-09830] c14 N71-26266

NUCLEAR POWER PLANTS

Development and characteristics of natural circulation radiator for use with nuclear power plants installed in lunar space stations
[NASA-CASE-IHQ-03673] c33 N71-29046

NUCLEAR PUMPED LASERS

Volumetric direct nuclear pumped laser
[NASA-CASE-LAR-12183-1] c36 N79-18307

NUCLEAR REACTOR CONTROL

Absorbing gas reactivity control system for minimizing power distribution and perturbation in nuclear reactors
[NASA-CASE-XLE-04599] c22 N72-20597

Control for nuclear thermionic power source
[NASA-CASE-NPO-13114-2] c73 N78-28913

NUCLEAR REACTORS

Nuclear thermionic converter --- tungsten-thorium oxide rods
[NASA-CASE-NPO-13121-1] c73 N77-18891

NUCLEATE BOILING

Method for improving heat transfer characteristics in nucleate boiling process
[NASA-CASE-XMS-04268] c33 N71-16277

NUCLEATION

Method and apparatus for supercooling and solidifying substances --- containless melts and space processing
[NASA-CASE-NFS-25242-1] c35 N81-24413

NULL ZONES

Manual control mechanism for adjusting control rod to null position
[NASA-CASE-XLA-01808] c15 N71-20740

NUMBER THEORY

Binary concatenated coding system
[NASA-CASE-MSC-14082-1] c60 N76-23850

NUMERICAL CONTROL

Digital sensor for counting fringes produced by interferometers with improved sensitivity and one photomultiplier tube to eliminate alignment problem
[NASA-CASE-LAR-10204] c14 N71-27215
Digital numerically controlled oscillator
[NASA-CASE-MSC-16747-1] c33 N81-17349
Controller for computer control of brushless dc motors --- automobile engines
[NASA-CASE-NPO-13970-1] c33 N81-20352

NUMERICAL INTEGRATION

Apparatus for computing square roots
[NASA-CASE-XGS-04768] c08 N71-19437

NUTATION

Flexible turnstile antenna system for reducing nutation in spin-oriented satellites
[NASA-CASE-XMF-00442] c31 N71-10747
Nutation damper for use on spinning body
[NASA-CASE-GSC-11205-1] c15 N73-25513

NUTATION DAMPERS

Active nutation controller
[NASA-CASE-GSC-12273-1] c35 N80-21719
Method of and apparatus for damping nutation motion with minimum spin axis attitude disturbance
[NASA-CASE-GSC-12551-1] c18 N81-12156

NUTS (FASTENERS)

Contamination free separation nut eliminating combustion products from ambient surroundings generated by squib firing
[NASA-CASE-XGS-01971] c15 N71-15922
Split nut and bolt separation device
[NASA-CASE-XNP-06914] c15 N71-21489
Device for securing together structural members with axially stretched bolt and nut
[NASA-CASE-GSC-11149-1] c15 N73-30457
High-torque open-end wrench
[NASA-CASE-NPO-13541-1] c37 N79-14383
Floating nut retention system
[NASA-CASE-MSC-16938-1] c37 N80-23653

O

O RING SEALS

High pressure four-way valve with O ring adapted to pass across inlet port
[NASA-CASE-XNP-00214] c15 N70-36908
Modified spiral wound retaining ring
[NASA-CASE-LAR-12361-1] c37 N81-12422
Self-stabilizing radial face seal
[NASA-CASE-LEW-12991-1] c37 N81-24442
Circumferential shaft seal
[NASA-CASE-LEW-12119-2] c37 N81-26447

OBLIQUE WINGS

Oblique-wing supersonic aircraft
[NASA-CASE-ARC-10470-3] c05 N76-29217

OCEAN DATA ACQUISITIONS SYSTEMS

Oceanic wave measurement system
[NASA-CASE-NFS-23862-1] c48 N80-18667

OCEAN SURFACE

Surface roughness measuring system --- synthetic aperture radar measurements of ocean wave height and terrain peaks
[NASA-CASE-NPO-13862-1] c35 N79-10391
Oceanic wave measurement system
[NASA-CASE-NFS-23862-1] c48 N80-18667

OCEAN THERMAL ENERGY CONVERSION

Ocean thermal plant

[NASA-CASE-KSC-11034-1] c44 N78-32542

OFFSHORE PLATFORMS

Ocean thermal plant
[NASA-CASE-KSC-11034-1] c44 N78-32542

OHMMETERS

Development of electrical system for indicating optimum contact between electrode and metal surface to permit improved soldering operation
[NASA-CASE-KSC-10242] c15 N72-23497

OIL EXPLORATION

Underwater seismic source --- for petroleum exploration
[NASA-CASE-NFO-14255-1] c46 N79-23555
Borehole geological assessment
[NASA-CASE-NPO-14231-1] c46 N80-10709

OIL RECOVERY

Oil and fat absorbing polymers
[NASA-CASE-NPO-11609-2] c27 N77-31308
In-situ laser retorting of oil shale
[NASA-CASE-LEW-12217-1] c43 N78-14452

OILS

Color photointerpretation of interference colors reflected from thin film oil-coated components in moving gases for gas flow visualization
[NASA-CASE-XMF-01779] c12 N71-20815
Oil and fat absorbing polymers
[NASA-CASE-NPO-11609-2] c27 N77-31308

OMNIDIRECTIONAL ANTENNAS

Microwave omnidirectional antenna for use on spacecraft
[NASA-CASE-XLA-03114] c09 N71-22888
Vertically stacked collinear array of independently fed omnidirectional antennas for use in collision warning systems on commercial aircraft
[NASA-CASE-LAR-10545-1] c09 N72-21244
Omnidirectional antenna array with circumferential slots for mounting on cylindrical space vehicle
[NASA-CASE-LAR-10163-1] c09 N72-25247

ONBOARD EQUIPMENT

Survival couch for aircraft or spacecraft crews
[NASA-CASE-XLA-00118] c05 N70-33285
Cryogenic storage system for gases onboard spacecraft
[NASA-CASE-XMS-04390] c31 N70-41871
Fiber optic transducers for monitoring and analysis of vibration in aerospace vehicles and onboard equipment
[NASA-CASE-XMF-02433] c14 N71-10616
Design and construction of satellite appendage tie-down cord
[NASA-CASE-XGS-02554] c31 N71-21064
Satellite aided aircraft collision avoidance system effective for large number of aircraft
[NASA-CASE-ERC-10090] c21 N71-24548
Closed loop servosystem for variable speed tape recorders onboard spacecraft
[NASA-CASE-NPO-10700] c07 N71-33613
Collapsible couch system for manned space vehicles
[NASA-CASE-MSC-13140] c05 N72-11085
Monostable multivibrator for conserving power in spacecraft systems
[NASA-CASE-GSC-10082-1] c10 N72-20221
Delayed simultaneous appendage release mechanism for use on spacecraft equipped with despin mechanisms and releasable components
[NASA-CASE-GSC-10814-1] c03 N73-20039
Electronic strain level counter on in-flight aircraft
[NASA-CASE-LAR-10756-1] c32 N73-26910
Magnetic heading reference
[NASA-CASE-LAR-11387-1] c04 N76-20114

OPERATIONAL AMPLIFIERS

Digital automatic gain amplifier
[NASA-CASE-KSC-11008-1] c33 N79-22373
Automatic level control circuit
[NASA-CASE-KSC-11170-1] c33 N81-29347

OPHTHALMOLOGY

Ultrasonic device for ophthalmic eye surgery with safe removal of macerated material
[NASA-CASE-LEW-11669-1] c05 N73-27062
Ophthalmic liquifaction pump
[NASA-CASE-LEW-12051-1] c52 N75-33640

OPTICAL COMMUNICATION

Fabry-Perot interferometer retrodirective reflector modulator for optical communication
[NASA-CASE-XGS-04480] c16 N69-27491

- Specifications and drawings for semipassive optical communication system
[NASA-CASE-XLA-01090] c07 N71-12389
- Optical communication system with gas filled waveguide for laser beam transmission
[NASA-CASE-HQN-10541-4] c16 N71-27183
- Development and characteristics of optical communications system based on modulation of light beams
[NASA-CASE-XLA-01090] c16 N71-28963
- High resolution radar transmitting system for transmitting optical pulses to targets
[NASA-CASE-NPO-11426] c07 N73-26119
- Apparatus for simulating optical transmission links
[NASA-CASE-GSC-11877-1] c74 N76-18913
- Fiber distributed feedback laser
[NASA-CASE-NPO-13531-1] c36 N76-24553
- Polarization compensator for optical communications
[NASA-CASE-GSC-11782-1] c74 N76-30053
- Gregorian all-reflective optical system
[NASA-CASE-GSC-12058-1] c74 N77-26942
- Wideband heterodyne receiver for laser communication system
[NASA-CASE-GSC-12053-1] c32 N77-28346
- Fiber optic multiplex optical transmission system
[NASA-CASE-KSC-11047-1] c74 N78-14889
- Fiber optic crossbar switch for automatically patching optical signals
[NASA-CASE-KSC-11104-1] c74 N81-12862
- OPTICAL COUPLING**
- Automatic quadrature control and measuring system --- using optical coupling circuitry
[NASA-CASE-MFS-21660-1] c35 N74-21017
- OPTICAL DATA PROCESSING**
- Optical data processing system using paraboloidal reflecting surfaces
[NASA-CASE-GSC-11256-1] c23 N73-30666
- Recorder/processor apparatus --- for optical data processing
[NASA-CASE-GSC-11553-1] c35 N74-15831
- Multibeam single frequency synthetic aperture radar processor for imaging separate range swaths
[NASA-CASE-NPO-14525-1] c32 N79-19195
- Multibeam single frequency synthetic aperture radar processor for imaging separate range swaths
[NASA-CASE-NPO-14525-2] c32 N80-32607
- Interleaving device
[NASA-CASE-GSC-12111-2] c33 N81-29342
- OPTICAL DENSITY**
- Medical diagnosis system and method with multispectral imaging --- depth of burns and optical density of the skin
[NASA-CASE-NPO-14402-1] c52 N81-27783
- OPTICAL EMISSION SPECTROSCOPY**
- Maksutov spectrograph for low light level research
[NASA-CASE-XLA-10402] c14 N71-29041
- OPTICAL EQUIPMENT**
- Detection instrument for light emitted from ATP biochemical reaction
[NASA-CASE-XGS-05534] c23 N71-16355
- Optical characteristics measuring apparatus
[NASA-CASE-XP-08840] c23 N71-16365
- Combined optical attitude and altitude indicating instrument for use in aircraft or spacecraft
[NASA-CASE-XLA-01907] c14 N71-23268
- Design and development of optical interferometer with laser light source for application to schlieren systems
[NASA-CASE-XLA-04295] c16 N71-24170
- Highly stable optical mirror assembly optimizing image quality of light diffraction patterns
[NASA-CASE-ERC-10001] c23 N71-24868
- Optical device containing rotatable prism and reflecting mirror for generating precise angles
[NASA-CASE-XGS-04173] c19 N71-26674
- Development and characteristics of Petzval type objective including field shaping lens for focusing light of specified wavelength band on curved photoreceptor
[NASA-CASE-GSC-10700] c23 N71-30027
- Development and characteristics of spectroradiometer with wedge filters to eliminate adverse effect of pinholes in filters
[NASA-CASE-HQN-10683] c14 N71-34389
- Slotted fine-adjustment support for optical devices
[NASA-CASE-MFS-20249] c15 N72-11386
- Development of process for constructing protective covers for solar cells
[NASA-CASE-GSC-11514-1] c03 N72-24037
- Development of light sensing system for controlled orientation of object relative to sun or other light source
[NASA-CASE-NPO-11311] c14 N72-25414
- Borescope with adjustable hinged telescoping optical system
[NASA-CASE-MFS-15162] c14 N72-32452
- Development and characteristics of cyclically operable, optical shutter for use as focal plane shutter for transmitting single radiation pulses
[NASA-CASE-NPO-10758] c14 N73-14427
- Method for producing reticles for use in outer space
[NASA-CASE-GSC-11188-2] c21 N73-19630
- Method and equipment for locating earth infrared horizon from space, independent of season and latitude
[NASA-CASE-LAR-10726-1] c14 N73-20475
- Optical imaging system for increasing light absorption efficiency of imaging detector
[NASA-CASE-ARC-10194-1] c23 N73-20741
- Attitude sensor
[NASA-CASE-LAR-10586-1] c19 N74-15089
- Formation of star tracking reticles
[NASA-CASE-GSC-11188-3] c74 N74-20008
- Method and apparatus for optically monitoring the angular position of a rotating mirror
[NASA-CASE-GSC-11353-1] c74 N74-21304
- Single reflector interference spectrometer and drive system therefor
[NASA-CASE-NPO-11932-1] c35 N74-23040
- Strain gauge ambiguity sensor for segmented mirror active optical system
[NASA-CASE-MFS-20506-1] c35 N75-12273
- Optical alignment device
[NASA-CASE-ARC-10932-1] c74 N76-22993
- Visual examination apparatus
[US-PATENT-RE-28,921] c52 N76-30793
- Optical instrument employing reticle having preselected visual response pattern formed thereon
[NASA-CASE-ARC-10976-1] c74 N77-22950
- Opto-mechanical subsystem with temperature compensation through isothermal design
[NASA-CASE-GSC-12059-1] c35 N77-27366
- Method and apparatus for producing an image from a transparent object
[NASA-CASE-GSC-11989-1] c74 N77-28932
- Method of treating the surface of a glass member
[NASA-CASE-GSC-12110-1] c27 N77-32308
- Process for producing a well-adhered durable optical coating on an optical plastic substrate --- abrasion resistant polymethyl methacrylate lenses
[NASA-CASE-ARC-11039-1] c74 N78-32854
- Water system virus detection
[NASA-CASE-MS-16098-1] c51 N79-10693
- Method of forming a sharp edge on an optical device
[NASA-CASE-GSC-12348-1] c74 N80-24149
- OPTICAL FILTERS**
- Lens assembly for solar furnace or solar simulator
[NASA-CASE-XP-04111] c14 N71-15622
- Noise elimination in coherent imaging system by axial rotation of optical lens for spectral distribution of degrading affects
[NASA-CASE-GSC-11133-1] c23 N72-11568
- Optical noise suppression device and method --- laser light exposing film
[NASA-CASE-MS-12640-1] c74 N76-31998
- System for producing chroma signals
[NASA-CASE-MS-14683-1] c74 N77-18893
- Optical conversion method --- for spacecraft television
[NASA-CASE-MS-12618-1] c74 N78-17865
- Partial polarizer filter
[NASA-CASE-GSC-12225-1] c74 N79-14891
- OPTICAL GYROSCOPES**
- Optical gyroscope system
[NASA-CASE-NPO-14258-1] c35 N81-33448
- OPTICAL HETERODYNING**
- Computerized optical system for producing

- multiple images of a scene simultaneously
[NASA-CASE-MSC-12404-1] c23 N73-13661
- Gregorian all-reflective optical system
[NASA-CASE-GSC-12058-1] c74 N77-26942
- Wideband heterodyne receiver for laser communication system
[NASA-CASE-GSC-12053-1] c32 N77-28346
- OPTICAL MEASUREMENT**
- Passive optical wind and turbulence remote detection system
[NASA-CASE-IMF-14032] c20 N71-16340
- Ellipsoidal mirror reflector for measuring reflectance
[NASA-CASE-IGS-05291] c23 N71-16341
- Single reflector interference spectrometer and drive system therefor
[NASA-CASE-NPO-11932-1] c35 N74-23040
- Hybrid holographic non-destructive test system
[NASA-CASE-MFS-23114-1] c38 N78-32447
- Plural output optometric sample cell and analysis system
[NASA-CASE-NPO-10233-1] c74 N78-33913
- Rotary target V-block --- aligning wind tunnel apparatus for optical measurement
[NASA-CASE-LAR-12007-2] c74 N79-25876
- Interferometric angle monitor
[NASA-CASE-GSC-12614-1] c35 N81-12386
- Apparatus for fiber optic liquid level sensing
[NASA-CASE-MSC-18674-1] c74 N81-24907
- OPTICAL MEASURING INSTRUMENTS**
- Design and development of optically pumped resonance magnetometer for determining vectoral components in spatial coordinate system
[NASA-CASE-IGS-04879] c14 N71-20428
- Optical gauging system for monitoring machine tool alignment
[NASA-CASE-XAC-09489-1] c15 N71-26673
- Optical system for selecting particular wavelength light beams from multiple wavelength light source
[NASA-CASE-ERC-10248] c14 N72-17323
- Optical sensing of supersonic flows by correlating deflections in laser beams through flow
[NASA-CASE-MFS-20642] c14 N72-21407
- Multiparameter vision testing apparatus
[NASA-CASE-MSC-13601-2] c54 N75-27759
- Noncontacting method for measuring angular deflection
[NASA-CASE-LAR-12178-1] c74 N80-21138
- Visible and infrared polarization ratio spectrophotometer
[NASA-CASE-LAR-12285-1] c35 N80-28687
- Film advance indicator
[NASA-CASE-LAR-12474-1] c35 N80-31774
- Optical crystal temperature gauge with fiber optic connections --- cryogenic systems
[NASA-CASE-MSC-18627-1] c74 N81-15818
- Interferometer
[NASA-CASE-NPO-14502-1] c74 N81-17888
- Focal plane array optical proximity sensor
[NASA-CASE-NPO-15155-1] c74 N81-22894
- OPTICAL PATHS**
- Optical instruments
[NASA-CASE-MSC-14096-1] c74 N74-15095
- OPTICAL PROPERTIES**
- Remote-reading torquemeter for use where high horsepower are transmitted at high rotative speeds
[NASA-CASE-XLE-00503] c14 N70-34818
- Quasi-optical microwave circuit with dielectric body for use with oversize waveguides
[NASA-CASE-ERC-10011] c07 N71-29065
- Development of light sensing system for controlled orientation of object relative to sun or other light source
[NASA-CASE-NPO-11311] c14 N72-25414
- Design and development of light sensing device for controlling orientation of object relative to sun or other light source
[NASA-CASE-NPO-11201] c14 N72-27409
- Device and method for determining X ray reflection efficiency, scattering properties, and surface finish of optical surfaces
[NASA-CASE-MFS-20243] c23 N73-13662
- Formation of star tracking reticles
[NASA-CASE-GSC-11188-3] c74 N74-20008
- Optically actuated two position mechanical mover
[NASA-CASE-NPO-13105-1] c37 N74-21060
- Modification of the electrical and optical properties of polymers --- ion irradiation to create texture
[NASA-CASE-LEW-13027-1] c27 N80-24437
- Heat transparent high intensity high efficiency solar cell
[NASA-CASE-LEW-12892-1] c44 N81-27598
- OPTICAL PUMPING**
- Xenon flashlamp driver system for optical laser pumping
[NASA-CASE-ERC-10283] c16 N72-25485
- Laser head for simultaneous optical pumping of several dye lasers --- with single flash lamp
[NASA-CASE-LAR-11341-1] c36 N75-19655
- Stabilization of He2(a 3 Sigma u+ molecules in liquid helium by optical pumping for vacuum UV laser 6
[NASA-CASE-NFO-13993-1] c72 N79-13826
- Off-axis coherently pumped laser
[NASA-CASE-GSC-12592-1] c36 N81-12407
- OPTICAL PYROMETERS**
- Filter arrangement for controlling light intensity in motion picture camera used in optical pyrometry
[NASA-CASE-XLA-00062] c14 N70-33254
- OPTICAL RADAR**
- Acquisition and tracking system for optical radar
[NASA-CASE-MFS-20125] c16 N72-13437
- OPTICAL RANGE FINDERS**
- Electro-optical attitude sensing device for landing approach of flight vehicle
[NASA-CASE-XMS-01994-1] c14 N72-17326
- Optical range finder using reflective first surfaces mirror and transmitting beam splitter
[NASA-CASE-MSC-12105-1] c14 N72-21409
- OPTICAL REFLECTION**
- Hybrid holographic system using reference, transmitted, and reflected beams simultaneously
[NASA-CASE-MFS-20074] c16 N71-15565
- Optical device containing rotatable prism and reflecting mirror for generating precise angles
[NASA-CASE-IGS-04173] c19 N71-26674
- Illumination system design for use as sunlight simulator in space environment simulators with multiple light sources reflected to single virtual source
[NASA-CASE-HQN-10781] c23 N71-30292
- Composition of diffuse reflective coating containing sodium chloride in combination with diol solvent and organic wetting and drying agents
[NASA-CASE-GSC-11214-1] c06 N73-13128
- Gregorian all-reflective optical system
[NASA-CASE-GSC-12058-1] c74 N77-26942
- Lightweight reflector assembly
[NASA-CASE-NFO-13707-1] c74 N77-28933
- Method and apparatus for splitting a beam of energy --- optical communication
[NASA-CASE-GSC-12083-1] c73 N78-32848
- Apparatus for and method of compensating dynamic unbalance
[NASA-CASE-GSC-12550-1] c37 N81-22358
- OPTICAL RESONANCE**
- Design and development of optically pumped resonance magnetometer for determining vectoral components in spatial coordinate system
[NASA-CASE-IGS-04879] c14 N71-20428
- Laser system with an antiresonant optical ring
[NASA-CASE-HQN-10844-1] c36 N75-19653
- OPTICAL SCANNERS**
- Optical scanner mounted on rotating support structure with method of compensating for image or satellite rotation
[NASA-CASE-IGS-02401] c14 N69-27485
- Optical apparatus for visual detection of roundness and regularity of cone surfaces
[NASA-CASE-IMF-00462] c14 N70-34298
- Electro-optical system with scan-in illuminator and scan-out photosensor for scanning variable transmittance objects
[NASA-CASE-NPO-11106] c14 N70-34697
- Multi-lobar scan horizon sensor
[NASA-CASE-IGS-00809] c21 N70-35427
- Optical scanner with linear housing and rotating camera
[NASA-CASE-NPO-11002] c14 N72-22441
- Spacecraft attitude sensing system design with narrow field of view sensor rotating about spacecraft x-y axis

- [NASA-CASE-GSC-10890-1] c21 N73-30640
Optical instruments
[NASA-CASE-MSC-14096-1] c74 N74-15095
Dual digital video switcher
[NASA-CASE-KSC-10782-1] c33 N75-30431
Traffic survey system --- using optical scanners
[NASA-CASE-MFS-22631-1] c66 N76-19888
Optical scanner --- laser doppler velocimeters
[NASA-CASE-LAR-11711-1] c74 N78-17866
Device for measuring the contour of a surface
[NASA-CASE-LAR-11869-1] c74 N78-27904
Velocity servo for continuous scan Fourier interference spectrometer
[NASA-CASE-NPO-14093-1] c35 N80-20563
Method of growing a ribbon crystal particularly suited for facilitating automated control of ribbon width
[NASA-CASE-NPO-14295-1] c76 N80-32245
- OPTICAL TRACKING**
Sun tracker with rotatable plane-parallel plate and two photocells
[NASA-CASE-XGS-01159] c21 N71-10678
Optical tracker with pair of FM reticles having patterns 90 deg out of phase
[NASA-CASE-XGS-05715] c23 N71-16100
Tracking mount for laser telescope employed in tracking large rockets and space vehicles to give information regarding azimuth and elevation
[NASA-CASE-MFS-14017] c14 N71-26627
Constant magnification optical tracking system
[NASA-CASE-NPO-14813-1] c74 N80-24152
Solar tracking system
[NASA-CASE-MFS-23999-1] c44 N81-24520
- OPTICAL TRANSFER FUNCTION**
Electronic optical transfer function analyzer
[NASA-CASE-MFS-21672-1] c74 N76-19935
- OPTIMIZATION**
Power point tracker for maintaining optimal output voltage of power source
[NASA-CASE-GSC-10376-1] c14 N71-27407
- ORAL HYGIENE**
Acoustic tooth cleaner
[NASA-CASE-LAR-12471-1] c52 N81-12724
- ORBITAL ASSEMBLY**
Structural members, method and apparatus
[NASA-CASE-MSC-16217-1] c31 N81-27323
- ORBITAL MANEUVERS**
Passive propellant system
[NASA-CASE-MFS-23642-1] c20 N80-10278
- ORBITAL MECHANICS**
Design and development of space shuttle system for delivering payload to earth orbit or celestial orbit
[NASA-CASE-MSC-12391] c30 N73-12884
- ORBITAL SPACE STATIONS**
Radial module manned space station with artificial gravity environment
[NASA-CASE-XMS-01906] c31 N70-41373
Internal and external serpentine devices for performing physical operations around orbital space stations
[NASA-CASE-XMF-05344] c31 N71-16345
Describing apparatus for manufacturing operations in low and zero gravity environments of orbital space flight
[NASA-CASE-MFS-20410] c15 N71-19214
- ORGANIC CHEMISTRY**
Process for interfacial polymerization of pyromellitic dianhydride and tetraamino benzene
[NASA-CASE-XLA-03104] c06 N71-11235
Amino acid analysis
[NASA-CASE-NPO-12130-1] c25 N75-14844
- ORGANIC COMPOUNDS**
Synthesis of high purity dianilinosilanes
[NASA-CASE-XMF-06409] c06 N71-23230
Preparation of dicyanoacetylene and vinylidene copolymers using organic compounds
[NASA-CASE-XNP-03250] c06 N71-23500
Infusible polymer production from reaction of polyfunctional epoxy resins with polyfunctional aziridine compounds
[NASA-CASE-NPO-10701] c06 N71-28620
Composition of diffuse reflective coating containing sodium chloride in combination with diol solvent and organic wetting and drying agents
[NASA-CASE-GSC-11214-1] c06 N73-13128
Automated system for identifying traces of organic chemical compounds in aqueous solutions
- [NASA-CASE-NPO-13063-1] c25 N76-18245
Analysis of volatile organic compounds --- trace amounts of organic volatiles in gas samples
[NASA-CASE-MSC-14428-1] c23 N77-17161
Electrophotolysis oxidation system for measurement of organic concentration in water
[NASA-CASE-MSC-16497-1] c25 N79-23167
- ORGANIC SILICON COMPOUNDS**
Oxygen post-treatment of plastic surface coated with plasma polymerized silicon-containing monomers
[NASA-CASE-ARC-10915-2] c27 N79-18052
- ORGANIC SULFUR COMPOUNDS**
Coal desulfurization --- using iron pentacarbonyl
[NASA-CASE-NPO-14272-1] c25 N81-33246
- ORGANOMETALLIC COMPOUNDS**
Ammonium perchlorate composite propellant with organic Cu/II/ chelate catalytic additive
[NASA-CASE-LAR-10173-1] c27 N71-14090
Organometallic compounds of niobium and tantalum useful for film deposition
[NASA-CASE-XNP-04023] c06 N71-28808
- ORGANOMETALLIC POLYMERS**
Chemical synthesis of thermally stable organometallic polymers with divalent metal ion and tetraphenylphosphonitrilic units
[NASA-CASE-HQN-10364] c06 N71-27363
Thiophenyl ether disiloxanes and trisiloxanes useful as lubricant fluids
[NASA-CASE-MFS-22411-1] c37 N74-21058
- ORIFICE FLOW**
Relief valve to permit slow and fast bleeding rates at difference pressure levels
[NASA-CASE-XMS-05894-1] c15 N69-21924
- ORIFICES**
Rocket engine injector orifice to accommodate changes in density, velocity, and pressure, thereby maintaining constant mass flow rate of propellant into rocket combustion chamber
[NASA-CASE-XLE-03157] c28 N71-24736
- ORTHOGONAL MULTIPLEXING THEORY**
Encoders designed to generate comma free biorthogonal Reed-Muller type code comprising conversion of 64 6-bit words into 64 32-bit data for communication purposes
[NASA-CASE-NPO-10595] c10 N71-25917
- ORTHOGONALITY**
Device for measuring two orthogonal components of force with gallium flotation of measuring target for use in vacuum environments
[NASA-CASE-XAC-04885] c14 N71-23790
- ORTHOPEDECS**
Locking mechanism for orthopedic braces
[NASA-CASE-GSC-12082-1] c54 N76-22914
Locking mechanism for orthopedic braces
[NASA-CASE-GSC-12082-2] c52 N81-25661
- ORTHOTROPIC CYLINDERS**
Method for shaping regeneratively cooled rocket motor casing having minimum thickness at each channel cross section
[NASA-CASE-XLE-00409] c28 N71-15658
Regeneratively cooled rocket motor casing with tapered channels to insure minimum thicknesses at each channel cross section for necessary strength requirements
[NASA-CASE-XLE-05689] c28 N71-15659
- OSCILLATION DAMPERS**
Design and operation of viscous pendulum damper
[NASA-CASE-XLA-02079] c12 N71-16894
Stabilization system for gravity-oriented satellites using single damper rod
[NASA-CASE-XAC-01591] c31 N71-17729
Suspended mass oscillation damper based on impact energy absorption for damping wind induced oscillations of tall stacks, antennas, and umbilical towers
[NASA-CASE-LAR-10193-1] c15 N71-27146
Damper system for alleviating air flow shock loads on wind tunnel models
[NASA-CASE-XLA-09480] c11 N71-33612
Apparatus for damping operator induced oscillations of a controlled system --- using adaptive filters to damp oscillations in a flight control system
[NASA-CASE-FRC-11041-1] c33 N80-20488
Method of and apparatus for damping nutation motion with minimum spin axis attitude disturbance
[NASA-CASE-GSC-12551-1] c18 N81-12156

OSCILLATIONS

Development of electrical circuit for suppressing oscillations across inductor operating in resonant mode
[NASA-CASE-BRC-10403-1] c10 N73-26228

OSCILLATORS

Oscillatory electromagnetic mirror drive system for horizon scanners
[NASA-CASE-XLA-03724] c14 N69-27461
Frequency control network for current feedback oscillators converting dc voltage to ac or higher dc voltages
[NASA-CASE-GSC-10041-1] c10 N71-19418
Development and characteristics of oscillating static inverter
[NASA-CASE-XGS-05289] c09 N71-19470
Voltage controlled oscillators and pulse amplitude modulation for signal ratio system
[NASA-CASE-XMF-04367] c09 N71-23545
Development and characteristics of fluid oscillator analog to digital converter with variable frequency controlled by signal passing through conditioning circuit
[NASA-CASE-LBW-10345-1] c10 N71-25899
Wideband voltage controlled oscillator with high phase stability
[NASA-CASE-XLA-03893] c10 N71-27271
Variable frequency subcarrier oscillator with temperature compensation
[NASA-CASE-XNP-03916] c09 N71-28810
Inverter oscillator with voltage feedback
[NASA-CASE-NPO-10760] c09 N72-25254
Controlled oscillator system with a time dependent output frequency
[NASA-CASE-NPO-11962-1] c33 N74-10194
Ultra-stable oscillator with complementary transistors
[NASA-CASE-GSC-11513-1] c33 N74-20862
LC-oscillator with automatic stabilized amplitude via bias current control --- power supply circuit for transducers
[NASA-CASE-MFS-21698-1] c33 N74-26732
Frequency modulated oscillator
[NASA-CASE-MFS-23181-1] c33 N77-17351
Distributed feedback acoustic surface wave oscillator
[NASA-CASE-NPO-13673-1] c71 N77-26919
JFET oscillator
[NASA-CASE-GSC-12555-1] c33 N80-26601
Digital numerically controlled oscillator
[NASA-CASE-MSC-16747-1] c33 N81-17349

OSCILLOSCOPES

Sign wave generation simulator for variable amplitude, frequency, damping, and phase pulses for oscilloscope display
[NASA-CASE-NPO-10251] c10 N71-27365
Scan oscilloscope for mapping surface sensitivity of photomultiplier tube
[NASA-CASE-LAR-10320-1] c09 N72-23172
Mechanical exposure interlock device for preventing film overexposure in oscilloscope camera
[NASA-CASE-LAR-10319-1] c14 N73-32322
X-Y alphanumeric character generator for oscilloscopes
[NASA-CASE-GSC-11582-1] c33 N75-19517

OUTER PLANETS EXPLORERS

Spectrometer integrated with a facsimile camera
[NASA-CASE-LAR-11207-1] c35 N75-19613

OUTGASSING

Optical characteristics measuring apparatus
[NASA-CASE-XNP-08840] c23 N71-16365
Helium outgassing process for fused glass coating on ion accelerator grid
[NASA-CASE-LBW-10278-1] c15 N71-28582
Fluid polydimethylsiloxane resin with low outgassing properties in cured state
[NASA-CASE-GSC-11358-1] c06 N73-26100

OUTPUT

Nonlinear nonsingular feedback shift registers
[NASA-CASE-NPO-13451-1] c33 N76-14373

OVENS

Oven for heat treating heat shields
[NASA-CASE-XMS-04318] c15 N69-27871
Thermocouple, multiple junction reference oven
[NASA-CASE-FRC-10112-1] c35 N81-26431

OVERVOLTAGE

Spark gap type protective circuit for fast sensing and removal of overvoltage conditions

[NASA-CASE-XAC-08981] c09 N69-39897
Sensing circuit for instantaneous reaction to power overloads
[NASA-CASE-GSC-10667-1] c10 N71-33129
Overvoltage protection network
[NASA-CASE-ARC-10197-1] c33 N74-17929
Overload protection system for power inverter
[NASA-CASE-NPO-13872-1] c33 N78-10377

OXAZOLE

Preparation of heterocyclic block copolymer omega-diamidoximes
[NASA-CASE-ARC-11060-1] c27 N79-22300
The 1,2,4-oxadiazole elastomers --- heat resistant polymers
[NASA-CASE-ARC-11253-1] c27 N81-17262

OXIDATION

Silicide coating process and composition for protection of refractory metals from oxidation
[NASA-CASE-XLE-10910] c18 N71-29040
Automated analysis of oxidative metabolites
[NASA-CASE-ARC-10469-1] c25 N75-12086
Hydrogen rich gas generator
[NASA-CASE-NPO-13464-2] c44 N76-29704
Process of forming catalytic surfaces for wet oxidation reactions
[NASA-CASE-MSC-14831-1] c25 N78-10225
Compound oxidized styrylphosphine --- flame resistant vinyl polymers
[NASA-CASE-MSC-14903-2] c27 N80-10358

OXIDATION RESISTANCE

Nickel base alloy with resistance to oxidation at high temperatures and superior stress-rupture properties
[NASA-CASE-XLE-02082] c17 N71-16026
Method of protecting the surface of a substrate --- by applying aluminide coating
[NASA-CASE-LBW-11696-1] c37 N75-13261
Duplex aluminized coatings
[NASA-CASE-LBW-11696-2] c26 N75-19408
High temperature oxidation resistant cermet compositions
[NASA-CASE-NPO-13666-1] c27 N77-13217
High temperature resistant cermet and ceramic compositions
[NASA-CASE-NPO-13690-2] c27 N79-14213
Method of making bearing materials --- self-lubricating, oxidation resistant composites for high temperature applications
[NASA-CASE-LBW-11930-4] c24 N79-17916
NiCrAl ternary alloy having improved cyclic oxidation resistance
[NASA-CASE-LBW-13339-1] c26 N81-12211

OXIDATION-REDUCTION REACTIONS

Formulated plastic separators for soluble electrode cells
[NASA-CASE-LBW-12358-2] c25 N78-25149
Electrochemical cell for rebalancing REDOX flow system
[NASA-CASE-LBW-13150-1] c44 N79-26474
Catalyst surfaces for the chromous/chromic redox couple
[NASA-CASE-LBW-13148-1] c33 N80-20487

OXIDE FILMS

Stainless steel panel for selective absorption of solar energy and the method of producing said panel
[NASA-CASE-MFS-23518-2] c44 N77-31611
Method for depositing an oxide coating --- producing solar panels
[NASA-CASE-LBW-13131-1] c26 N81-24230
Method of forming oxide coatings
[NASA-CASE-LBW-13132-1] c44 N81-27616

OXIDES

Utilization of lithium p-lithiophenoxide to prepare star polymers
[NASA-CASE-NFO-10998-1] c06 N73-32029

OXIDIZERS

Electrolytically regenerative hydrogen-oxygen fuel cells
[NASA-CASE-XLE-04526] c03 N71-11052
Fuel and oxidizer injection head for thrust chamber of reaction engine
[NASA-CASE-NFO-10046] c28 N72-17843

OXIMETRY

Ear oximeter for monitoring blood oxygenation and pressure, pulse rate, and pressure pulse curve, using dc and ac amplifiers
[NASA-CASE-XAC-05422] c04 N71-23185

OXYGEN

Analytical test apparatus and method for determining oxygen content in alkali liquid metal
[NASA-CASE-XLE-01997] c06 N71-23527
Heated tungsten filter for removing oxygen impurities from cesium
[NASA-CASE-INP-04262-2] c17 N71-26773
Method for detecting oxygen in gas by thermoluminescence
[NASA-CASE-LAR-10668-1] c06 N73-16106
Method for obtaining oxygen from lunar or similar soil
[NASA-CASE-MSC-12408-1] c46 N74-13011
Nonflammable coating compositions --- for use in high oxygen environments
[NASA-CASE-MFS-20486-2] c27 N74-17283

OXYGEN CONSUMPTION
Respiration analyzing method and apparatus for determining subjects oxygen consumption in aerospace environments
[NASA-CASE-IFB-08403] c05 N71-11202

OXYGEN FLUORIDES
Utilization of oxygen difluoride for syntheses of fluoropolymers
[NASA-CASE-NPO-12061-1] c27 N76-16228

OXYGEN METABOLISM
Metabolic analyzer --- for measuring metabolic rate and breathing dynamics of human beings
[NASA-CASE-MFS-21415-1] c52 N74-20728

OXYGEN PLASMA
Oxygen post-treatment of plastic surface coated with plasma polymerized silicon-containing monomers
[NASA-CASE-ARC-10915-2] c27 N79-18052

OXYGEN REGULATORS
Lead-oxygen dc power supply system having a closed loop oxygen and water system
[NASA-CASE-MFS-23059-1] c44 N76-27664

OXYGEN SUPPLY EQUIPMENT
Self-contained breathing apparatus
[NASA-CASE-MSC-14733-1] c54 N76-24900

OZONE
Thermoluminescent aerosol analysis
[NASA-CASE-LAR-12046-1] c25 N78-15210
Ozonation of cooling tower waters
[NASA-CASE-NPO-14340-1] c45 N80-14579
Curable liquid hydrocarbon prepolymers containing hydroxyl groups and process for producing same
[NASA-CASE-NPO-13137-1] c27 N80-32514

P

P-N JUNCTIONS

Lithium drifted silicon radiation detector with gold rectifying contacts
[NASA-CASE-XLE-10529] c14 N69-23191
Semiconductor p-n junction on needle apex to provide stress and strain sensor
[NASA-CASE-XLA-04980] c09 N69-27422
Improving radiation resistance of silicon semiconductor junctions by doping with lithium
[NASA-CASE-XGS-07801] c09 N71-12513
Silicon radiation detecting probe design for in vivo biomedical use
[NASA-CASE-XMS-01177] c05 N71-19440
Electrode connection for n-on-p silicon solar cell
[NASA-CASE-XLE-04787] c03 N71-20492
Water content in vapor deposition atmosphere for forming n-type and p-type junctions of zinc doped gallium arsenide
[NASA-CASE-XNP-01961] c26 N71-29156
Method for making semiconductor p-n junction stress and strain sensor
[NASA-CASE-XLA-04980-2] c14 N72-28438
Resin for protecting p-n semiconductor junction surface
[NASA-CASE-ERC-10339-1] c18 N73-30532
Method and apparatus for measuring minority carrier lifetimes and bulk diffusion length in p-n junction solar cells
[NASA-CASE-NPO-14100-1] c44 N79-12541
Back wall solar cell
[NASA-CASE-LEW-12236-2] c44 N79-14528

P-TYPE SEMICONDUCTORS
Addition of group 3 elements to silicon semiconductor material for increased resistance to radiation damage in solar cells

[NASA-CASE-XLE-02798] c26 N71-23654
Integrated P-channel MOS gyrator
[NASA-CASE-MFS-22343-1] c33 N74-34638

PACKAGES
Impact testing machine for imparting large impact forces on high velocity packages
[NASA-CASE-INP-04817] c14 N71-23225
One hand backpack harness
[NASA-CASE-LAR-10102-1] c05 N72-23085

PACKAGING
Characteristics of device for folding thin flexible sheets into compact configuration
[NASA-CASE-XLA-00137] c15 N70-33180
Method of compactly packaging centrifugally expandable lightweight flexible reflector satellite
[NASA-CASE-XLA-00138] c31 N70-37981
Development and characteristics of system for skin packaging articles using thermoplastic film heating and vacuum operated equipment
[NASA-CASE-MFS-20855] c15 N73-27405
Double-sided solar cell package
[NASA-CASE-NPO-14199-1] c44 N79-25482

PACKING DENSITY
Micropacked column for rapid chromatographic analysis using low gas flow rates
[NASA-CASE-XNP-04816] c06 N69-39936

PACKINGS (SEALS)
Fluid seal for rotating shafts
[NASA-CASE-LEW-11676-1] c37 N76-22541

PAD
Lubricated journal bearing
[NASA-CASE-LEW-11076-3] c37 N75-30562

PAINTS
Nitroaniline sulfate, intumescent paints
[NASA-CASE-ARC-10099-1] c18 N71-15469
Composition and production method of alkali metal silicate paint with ultraviolet reflection properties
[NASA-CASE-XGS-04799] c18 N71-24183
White paint production by heating impure aluminum silicate clay having low solar absorptance
[NASA-CASE-XNP-02139] c18 N71-24184

PALLADIUM
Electrically conductive palladium containing polyimide films
[NASA-CASE-LAR-12705-1] c33 N80-24549

PALLADIUM COMPOUNDS
Preventing pressure buildup in electrochemical cells by reacting palladium oxide with evolved hydrogen
[NASA-CASE-XGS-01419] c03 N70-41864
Separation of dissolved hydrogen from water and coating with palladium black
[NASA-CASE-MSC-13335-1] c06 N72-31140

PANELS
Nut and bolt fastener permitting all-directional movement of skin sections with respect to supporting structure
[NASA-CASE-XLA-01807] c15 N71-10799
Multilayer insulation panels for cryogenic liquid containers
[NASA-CASE-MFS-14023] c33 N71-25351
Method and apparatus for fabricating solar cell panels
[NASA-CASE-INP-03413] c03 N71-26726
Method for making pressurized meteoroid penetration detector panels
[NASA-CASE-XLA-08916] c15 N71-29018
Honeycomb panels of minimal surface, periodic tubule layers
[NASA-CASE-ERC-10364] c18 N72-25540
Pressurized panel meteoroid detector
[NASA-CASE-XLA-08916-2] c14 N73-28487
Ultrasonic scanner for radial and flat panels
[NASA-CASE-MFS-20335-1] c35 N74-10415
Folding structure fabricated of rigid panels
[NASA-CASE-IBQ-02146] c18 N75-27040
Method of making a composite sandwich lattice structure
[NASA-CASE-LAR-11898-2] c24 N78-17149
Selective coating for solar panels --- using black chrome and black nickel
[NASA-CASE-LEW-12159-1] c44 N78-19599
High visibility air sea rescue panel
[NASA-CASE-MSC-12564-2] c03 N78-25070
Hexagon solar power panel
[NASA-CASE-NPO-12148-1] c44 N78-27515

- Aluminium or copper substrate panel for selective absorption of solar energy
[NASA-CASE-MFS-23518-3] c44 N80-16452
- Structural wood panels with improved fire resistance
[NASA-CASE-ARC-11174-1] c24 N81-13999
- PAPER (MATERIAL)**
Process for purification of waste water produced by a Kraft process pulp and paper mill
[NASA-CASE-NPO-13847-2] c85 N79-17747
- PAPERS**
Guide for a typewriter
[NASA-CASE-MFS-15218-1] c37 N77-19457
- PARABOLIC ANTENNAS**
Device for improving efficiency of parabolic horn antenna system for linearly polarized signals
[NASA-CASE-XNP-00611] c09 N70-35219
- Drive system for parabolic tracking antenna with reversible motion and minimal backlash
[NASA-CASE-NPO-10173] c15 N71-24696
- Switchable beamwidth monopulse method and system
[NASA-CASE-GSC-11924-1] c33 N76-27472
- Telescoping columns --- parabolic antenna support
[NASA-CASE-LAR-12195-1] c31 N81-27324
- PARABOLIC REFLECTORS**
Device for improving efficiency of parabolic reflector horn for linearly or circularly polarized waves
[NASA-CASE-XNP-00540] c09 N70-35382
- Foldable, double cone and parabolic reflector system for solar ray concentration
[NASA-CASE-XLA-04622] c03 N70-41580
- Self erecting parabolic reflector design for use in space
[NASA-CASE-XMS-03454] c09 N71-20658
- Plural beam antenna with parabolic reflectors
[NASA-CASE-GSC-11013-1] c09 N73-19234
- Multimode antenna feed system for microwave and broadband communication
[NASA-CASE-GSC-11046-1] c07 N73-28013
- Single frequency, two feed dish antenna having switchable beamwidth
[NASA-CASE-GSC-11968-1] c32 N76-15329
- Sun tracking solar energy collector
[NASA-CASE-NPO-13921-1] c44 N79-14526
- Horizontally mounted solar collector
[NASA-CASE-MFS-23349-1] c44 N79-23481
- Solar concentrator
[NASA-CASE-MFS-23727-1] c44 N80-14473
- Apparatus for and method of compensating dynamic unbalance
[NASA-CASE-GSC-12550-1] c37 N81-22358
- PARABOLOID MIRRORS**
Optical data processing system using paraboloidal reflecting surfaces
[NASA-CASE-GSC-11296-1] c23 N73-30666
- Three mirror glancing incidence system for X-ray telescope
[NASA-CASE-MFS-21372-1] c74 N74-27866
- PARACHUTE DESCENT**
Multiple parachute system for landing control of Apollo type spacecraft
[NASA-CASE-XLA-00898] c02 N70-36804
- Parachute system for lowering manned spacecraft from post-reentry to ocean landing
[NASA-CASE-XLA-00195] c02 N70-38009
- Piston in bore cutter for severing parachute control lines and sealing cable hole to prevent water leakage into load
[NASA-CASE-XMS-04072] c15 N70-42017
- Development and operating principles of gas generator for deploying recovery parachutes from space capsules during atmospheric entry
[NASA-CASE-LAR-10549-1] c31 N73-13898
- PARACHUTE FABRICS**
Lightweight, variable solidity knitted parachute fabric --- for aerodynamic decelerators
[NASA-CASE-LAR-10776-1] c02 N74-10034
- System for refurbishing and processing parachutes
[NASA-CASE-KSC-11042-1] c02 N81-14967
- PARACHUTES**
System for controlling torque buildup in suspension of gondola connected to balloon by parachute shroud lines
[NASA-CASE-GSC-11077-1] c02 N73-13008
- Deploy/release system --- model aircraft flight control
[NASA-CASE-LAR-11575-1] c02 N76-16014
- System for refurbishing and processing parachutes
[NASA-CASE-KSC-11042-1] c02 N81-14967
- System and method for refurbishing and processing parachutes --- monorial conveyor system
[NASA-CASE-KSC-11042-2] c02 N81-26073
- PARAGLIDERS**
Multiple parachute system for landing control of Apollo type spacecraft
[NASA-CASE-XLA-00898] c02 N70-36804
- PARALLAX**
Projection system for display of parallax and perspective
[NASA-CASE-MFS-23194-1] c35 N78-17357
- PARALLEL PLATES**
Describing instrument capable of measuring true shear viscosity of liquids and viscoelastic materials
[NASA-CASE-XNP-09462] c14 N71-17584
- Dynamic capacitor having a peripherally driven element and system incorporating the same
[NASA-CASE-XNP-02899-1] c33 N79-21265
- Multiple plate hydrostatic viscous damper
[NASA-CASE-LEW-12445-1] c37 N81-22360
- PARALLEL PROCESSING (COMPUTERS)**
Digital data reformatter/deserializer
[NASA-CASE-NPO-13676-1] c60 N79-20751
- Massively parallel processor computer
[NASA-CASE-GSC-12223-1] c60 N79-27864
- PARALLELOGRAMS**
Unidirectional flexural pivot
[NASA-CASE-GSC-12622-1] c37 N81-22359
- PARAMETRIC AMPLIFIERS**
Development of idler feedback system to reduce electronic noise problem in two parametric amplifiers
[NASA-CASE-LAR-10253-1] c09 N72-25258
- Millimeter wave pumped parametric amplifier
[NASA-CASE-GSC-11617-1] c33 N74-32660
- PARAMETRIC FREQUENCY CONVERTERS**
Method and apparatus for quadriphase-shift-key and linear phase modulation
[NASA-CASE-NPO-14444-1] c33 N81-15192
- PARAWINGS**
Method for deployment of flexible wing glider from space vehicle with minimum impact and loading
[NASA-CASE-XMS-00907] c02 N70-41630
- PARKING**
Automated multi-level vehicle parking system
[NASA-CASE-NPO-13058-1] c37 N77-22480
- PARTIAL PRESSURE**
Equipment for measuring partial water vapor pressure in gas tank
[NASA-CASE-XMS-01618] c14 N71-20741
- PARTICLE ACCELERATION**
Selector mechanism for mechanical separation and discrimination of high velocity molecular particles
[NASA-CASE-XLE-01533] c11 N71-10777
- Method and apparatus for use in forming highly collimated beam of microparticles with high charge to mass ratio and injecting beam into electrostatic accelerating tube
[NASA-CASE-XGS-06628] c24 N71-16213
- PARTICLE ACCELERATOR TARGETS**
Dispensing targets for ion beam particle generators
[NASA-CASE-NPO-13112-1] c73 N74-26767
- Deuterium pass through target --- neutron emitting target
[NASA-CASE-LEW-11866-1] c72 N76-15860
- Closed loop spray cooling apparatus --- for particle accelerator targets
[NASA-CASE-LEW-11981-1] c31 N78-17237
- PARTICLE BEAMS**
Particle beam power density detection and measurement apparatus
[NASA-CASE-XLI-00243] c14 N70-38602
- Doppler shift system --- system for measuring velocities of radiating particles
[NASA-CASE-BQN-10740-1] c72 N74-19310
- PARTICLE COLLISIONS**
Momentum-velocity analyzer for measuring minute space particles
[NASA-CASE-XMS-04201] c14 N71-22990
- PARTICLE DENSITY (CONCENTRATION)**
Particle detector for measuring micrometeoroid velocity in space

[NASA-CASE-XLA-00495] c14 N70-41332
PARTICLE EMISSION
 Mosaic semiconductor radiation detector and position indicator systems engineering for low energy particles
 [NASA-CASE-XGS-03230] c14 N71-23401
 Apparatus for detecting particle emission lower than noise level of multiplier tube
 [NASA-CASE-XLA-07813] c14 N72-17328
PARTICLE ENERGY
 Particle detector for indicating incidence and energy of minute space particles
 [NASA-CASE-XLA-00135] c14 N70-33322
 Particulate and aerosol detector
 [NASA-CASE-LAR-11434-1] c35 N76-22509
PARTICLE MASS
 Cosmic dust analyzer
 [NASA-CASE-MSC-13802-2] c35 N76-15431
 Microbalance --- for measuring particle mass
 [NASA-CASE-MSC-11242] c35 N78-17358
PARTICLE MOTION
 Moving particle composition analyzer
 [NASA-CASE-GSC-11889-1] c35 N76-16353
PARTICLE PRODUCTION
 Production of I-123
 [NASA-CASE-LEW-11390-3] c25 N76-29379
PARTICLE SIZE DISTRIBUTION
 Micropacked column for rapid chromatographic analysis using low gas flow rates
 [NASA-CASE-XNP-04816] c06 N69-39936
 Apparatus for producing hydrocarbon slurry containing small particles of magnesium for use as jet aircraft fuel
 [NASA-CASE-XLE-00010] c15 N70-33382
 Production of high strength refractory compounds and microconstituents into refractory metal matrix
 [NASA-CASE-XLE-03940] c18 N71-26153
 Grain refinement control in TIG arc welding
 [NASA-CASE-MSC-19095-1] c37 N75-19683
 Forward-scatter polarimeter for determining the gaseous depolarization factor in the presence of polluting polydispersed particles
 [NASA-CASE-NPO-13756-1] c35 N76-14434
 Apparatus for handling micron size range particulate material
 [NASA-CASE-NPO-10151] c37 N78-17386
 Frequency-scanning particle size spectrometer
 [NASA-CASE-NPO-13606-2] c35 N80-18364
 Process for preparation of large-particle-size monodisperse latexes
 [NASA-CASE-MPS-25000-1] c25 N81-19242
 Polyvinyl alcohol battery separator containing inert filler --- alkaline batteries
 [NASA-CASE-LEW-13556-1] c44 N81-27615
PARTICLE TRAJECTORIES
 Micrometeoroid velocity and trajectory analyzer
 [NASA-CASE-GSC-11892-1] c35 N76-15433
 Direction sensitive laser velocimeter --- determining the direction of particles using a helium-neon laser
 [NASA-CASE-LAR-12177-1] c36 N81-24422
PARTICLES
 Development of device for separating, collecting, and viewing soil particles
 [NASA-CASE-XNP-09770] c15 N71-20440
 Development of apparatus for producing metal powder particles of controlled size
 [NASA-CASE-XLE-06461-2] c17 N72-28535
 Particle parameter analyzing system --- x-y plotter circuits and display
 [NASA-CASE-XLE-06094] c33 N78-17293
 Surfactant-assisted liquefaction of particulate carbonaceous substances
 [NASA-CASE-NPO-13904-1] c25 N79-11152
PARTICULATE SAMPLING
 Development and operation of apparatus for sampling particulates in gases in upper atmosphere
 [NASA-CASE-HQN-10037-1] c14 N73-27376
 Electrophoretic sample insertion --- device for uniformly distributing samples in flow path
 [NASA-CASE-MPS-21395-1] c25 N74-26948
 Sampler of gas borne particles
 [NASA-CASE-NPO-13396-1] c35 N76-18401
 Fine particulate capture device
 [NASA-CASE-LEW-11583-1] c35 N79-17192
 Biocontamination and particulate detection system
 [NASA-CASE-NPO-13953-1] c35 N79-28527

PASSAGEWAYS

Space expandable tether device for use as passageway between two docked spacecraft
 [NASA-CASE-XMS-10993] c15 N71-28936

PASSIVE SATELLITES

Erectable, inflatable, radio signal reflecting passive communication satellite
 [NASA-CASE-XLA-00210] c30 N70-40309
 Apparatus for measuring backscatter and transmission characteristics of sample segment of large spherical passive satellites
 [NASA-CASE-XGS-02608] c07 N70-41678
 Forming inflatable panels erectable in space for passive communication satellite
 [NASA-CASE-XLA-03497] c15 N71-23052

PATIENTS

Stretcher with rigid head and neck support with capability of supporting immobilized person in vertical position for removal from vehicle hatch to exterior also useful as splint stretcher
 [NASA-CASE-XMF-06589] c05 N71-23159

PATTERN RECOGNITION

Roughness detector for recording surface pattern of irregularities
 [NASA-CASE-XLA-00203] c14 N70-34161
 Auditory display for the blind
 [NASA-CASE-HQN-10832-1] c71 N74-21014
 Optical signature generating and correlating apparatus
 [NASA-CASE-NPO-15226-1] c74 N81-19899

PAYLOAD RETRIEVAL (STS)

Simulator method and apparatus for practicing the mating of an observer-controlled object with a target
 [NASA-CASE-MPS-23052-2] c74 N79-13855
 Satellite retrieval system
 [NASA-CASE-MPS-25403-1] c18 N81-24164

PAYLOADS

Plastic foam generator for space vehicle instrument payload package flotation in water landing
 [NASA-CASE-XLA-00838] c03 N70-36778
 Stage separation system for spinning vehicles and payloads
 [NASA-CASE-XLA-02132] c31 N71-10582
 Payload/spent rocket engine case separation system
 [NASA-CASE-XLA-05369] c31 N71-15687
 High velocity guidance and spin stabilization gyro controlled jet reaction system for launch vehicle payloads
 [NASA-CASE-XLA-01339] c31 N71-15692
 Payload soft landing system using stowable gas bag
 [NASA-CASE-XLA-09881] c31 N71-16085
 Zero gravity apparatus utilizing pneumatic decelerating means to create payload subjected to zero gravity conditions by dropping its height
 [NASA-CASE-XMF-06515] c14 N71-23227

PCM TELEMETRY

Variable time constant, wide frequency range smoothing network for noise removal from pulse chains
 [NASA-CASE-XGS-01983] c10 N70-41964
 Data acquisition and processing system with buffer storage and timing device for magnetic tape recording of PCM data and timing information
 [NASA-CASE-NPO-12107] c08 N71-27255
 High speed direct binary to binary coded decimal converter for use in PCM telemetry systems
 [NASA-CASE-KSC-10326] c08 N72-21197

PEELING

Wire stripper
 [NASA-CASE-FEC-10111-1] c37 N79-10419

PELLETS

Supporting structure for simultaneous exposure of pellets to X rays
 [NASA-CASE-XNP-06031] c15 N71-15606

PELLIER EFFECTS

Use of silicon controlled rectifier shorting circuit to protect thermoelectric generator source from thermal destruction
 [NASA-CASE-XGS-04808] c03 N69-25146

PENETRANTS

Dye penetrant and technique for nondestructive tests of solid surfaces contacted by liquid oxygen
 [NASA-CASE-XMF-02221] c18 N71-27170

PENETRATION

- Method and device for detection of surface discontinuities or defects
[NASA-CASE-MSC-14187-1] c35 N74-32879
- Fire extinguishing apparatus having a slidable mass for a penetrator nozzle --- for penetrating aircraft and shuttle orbiter skin
[NASA-CASE-KSC-11064-1] c31 N81-14137

PENETROMETERS

- Development and characteristics of penetrometer for measuring physical properties of lunar surface
[NASA-CASE-XLA-00934] c14 N71-22765
- Portable penetrometer for analyzing soil characteristics
[NASA-CASE-MFS-20774] c14 N73-19420
- Auger-type soil penetrometer for burrowing into soil formations
[NASA-CASE-XNP-05530] c14 N73-32321
- Penetrometer --- for determining load bearing characteristics of inclined surfaces
[NASA-CASE-NPO-11103-1] c35 N77-27367
- Coal-shale interface detection
[NASA-CASE-MFS-23720-3] c43 N79-25443

PERCEPTION

- Measuring method for cutaneous perception using instrument with elongated tubular housing
[NASA-CASE-MSC-13609-1] c05 N72-25122

PERFLUORO COMPOUNDS

- Chemical synthesis of hydroxy terminated perfluoro ethers as intermediates for highly fluorinated polyurethane resins
[NASA-CASE-NPO-10768] c06 N71-27254
- Perfluoro polyether acyl fluorides
[NASA-CASE-NPO-10765] c06 N72-20121
- Reaction of polyperfluoropolyenes with fluorine to produce saturated polymer chain or create reactive sites on chain
[NASA-CASE-NPO-10862] c06 N72-22107
- Silphenylenesiloxane polymer with in-chain perfluoroalkyl groups
[NASA-CASE-MFS-26979] c06 N72-25151
- Polymerization of perfluorobutadiene
[NASA-CASE-NPO-10863-2] c06 N72-25152
- Formation of polyurethane resins from hydroxy terminated perfluoro ethers
[NASA-CASE-NPO-10768-2] c06 N72-27144
- Process for preparing disilanolis with in-chain perfluoroalkyl groups
[NASA-CASE-MFS-20979-2] c06 N73-32030
- Perfluoro alkylene dioxy-bis-(4-phthalic anhydrides and oxy-bis-(perfluoroalkyleneoxyphthalic anhydrides
[NASA-CASE-MFS-22356-1] c23 N75-30256
- Precision heat forming of tetrafluoroethylene tubing
[NASA-CASE-MSC-18430-1] c31 N80-17292
- Preparation of perfluorinated imidoamidoximes --- for eventual preparation of heat and chemical resistant polymers
[NASA-CASE-ABC-11267-1] c23 N80-26386
- Preparation of perfluorinated 1,2,4-oxadiazoles --- heat and chemical resistant polymers
[NASA-CASE-ABC-11267-2] c25 N80-26407

PERFLUOROALKANE

- Preparation of heterocyclic block copolymer omega-diamidoximes
[NASA-CASE-ABC-11060-1] c27 N79-22300

PERFORATED PLATES

- Helium outgassing process for fused glass coating on ion accelerator grid
[NASA-CASE-LBW-10278-1] c15 N71-28582

PERFORATED SHELLS

- Method of fabricating an article with cavities --- with thin bottom walls
[NASA-CASE-LAR-10318-1] c31 N74-18089

PERFORMANCE PREDICTION

- Failure detection and control means for improved drift performance of a gimbaled platform system
[NASA-CASE-MFS-23551-1] c04 N76-26175

PERFORMANCE TESTS

- Flexible, frangible electrochemical cell and package for operation in low temperature environment
[NASA-CASE-XGS-10010] c03 N72-15586
- Test method and equipment for identifying faulty cells or connections in solar cell assemblies
[NASA-CASE-NPO-10401] c03 N72-20C33

- Development of apparatus for detonating explosive devices in order to determine forces generated and detonation propagation rate
[NASA-CASE-LAB-10800-1] c33 N72-27959

PERIODIC VARIATIONS

- Mount for continuously orienting a collector dish in a system adapted to perform both diurnal and seasonal solar tracking
[NASA-CASE-MFS-23267-1] c35 N77-20401

PERMEABILITY

- Water insoluble, cationic permselective membrane
[NASA-CASE-NFO-11091] c18 N72-22567
- System for detecting substructure microfractures and method therefore
[NASA-CASE-NFO-14192-1] c39 N80-10507
- Dialysis system --- using ion exchange resin membranes permeable to urea molecules
[NASA-CASE-NPO-14101-1] c52 N80-14687
- Geological assessment probe
[NASA-CASE-NFO-14558-1] c46 N80-24906
- Absorbent product and articles made therefrom --- for collection of human wastes
[NASA-CASE-MSC-18223-1] c24 N81-16127

PEROXIDES

- Low pressure perfluorobutadiene polymerization with peroxide catalysts
[NASA-CASE-NFO-10447] c06 N70-11252

PERSPIRATION

- Manufacturing process for making perspiration resistant-stress resistant biopotential electrode
[NASA-CASE-MSC-90153-2] c05 N72-25120
- Sweat collection capsule
[NASA-CASE-ABC-11031-1] c52 N81-29763

PERTURBATION

- Absorbing gas reactivity control system for minimizing power distribution and perturbation in nuclear reactors
[NASA-CASE-XLE-04599] c22 N72-20597

PERTURBATION THEORY

- Dual wavelength scanning Doppler velocimeter --- without perturbation of flow fields
[NASA-CASE-ABC-10637-1] c35 N75-16783

PHASE COHERENCE

- Apparatus for estimating amplitude and sign of phase difference or time lag between two signals
[NASA-CASE-NFO-11203] c10 N72-20224
- Coherent receiver employing nonlinear coherence detection for carrier tracking
[NASA-CASE-NFO-11921-1] c32 N74-30523

PHASE CONTROL

- System designed to reduce time required for obtaining synchronization in data communication with spacecraft utilizing pseudonoise codes
[NASA-CASE-NPO-10214] c10 N71-26577
- Wideband voltage controlled oscillator with high phase stability
[NASA-CASE-XLA-03893] c10 N71-27271
- Voltage controlled oscillator circuit for two-phase induction motor control
[NASA-CASE-MFS-21465-1] c10 N73-32145
- System for generating timing and control signals
[NASA-CASE-NPO-13125-1] c33 N75-19519
- Digital numerically controlled oscillator
[NASA-CASE-MSC-16747-1] c33 N81-17349
- Combinational logic for generating gate drive signals for phase control rectifiers
[NASA-CASE-MFS-25208-1] c33 N81-27402

PHASE DEMODULATORS

- Development of phase demodulation system with two phase locked loops
[NASA-CASE-XNP-00777] c10 N71-19469
- Linear phase demodulator including a phase locked loop with auxiliary feedback loop
[NASA-CASE-GSC-12018-1] c33 N77-14334

PHASE DETECTORS

- Detector assembly for discriminating first signal with respect to presence or absence of second signal at time of occurrence of first signal
[NASA-CASE-XNP-00701] c09 N70-40272
- Bipolar phase detector and corrector for split phase PCM data signals
[NASA-CASE-XGS-01590] c07 N71-12392
- High speed phase detector design indicating phase relationship between two square wave input signals
[NASA-CASE-XNP-01306-2] c09 N71-24596

Phase protection system for ac power lines
[NASA-CASE-MSC-17832-1] c33 N74-14956

Low distortion automatic phase control circuit
--- voltage controlled phase shifter
[NASA-CASE-MFS-21671-1] c33 N74-22885

Correlation type phase detector --- with time
correlation integrator for frequency
multiplexed signals
[NASA-CASE-GSC-11744-1] c33 N75-26243

Impact position detector for outer space particles
[NASA-CASE-GSC-11829-1] c35 N75-27331

Frequency discriminator and phase detector circuit
[NASA-CASE-NPO-11515-1] c33 N77-13315

Phase substitution of spare converter for a
failed one of parallel phase staggered
converters
[NASA-CASE-NPO-13812-1] c33 N77-30365

Apparatus and method for stabilized phase
detection for binary signal tracking loops
[NASA-CASE-MSC-16461-1] c33 N79-11313

Receiving and tracking phase modulated signals
[NASA-CASE-MSC-16170-2] c32 N81-16338

High stability buffered phase comparator
[NASA-CASE-GSC-12645-1] c33 N81-31482

PHASE DEVIATION
System for stabilizing cable phase delay
utilizing a coaxial cable under pressure
[NASA-CASE-NPO-13138-1] c33 N74-17927

PHASE LOCK DEMODULATORS
Phase locked demodulator with bandwidth
switching amplifier circuit
[NASA-CASE-XNP-01107] c10 N71-28659

PHASE LOCKED SYSTEMS
System for phase locking onto carrier frequency
signal located within receiver bandpass
[NASA-CASE-XGS-04994] c09 N69-21543

Phase locked loop with sideband rejecting
properties in continuous wave tracking radar
[NASA-CASE-XNP-02723] c07 N70-41680

Development of automatic frequency
discriminators and control for phase lock loop
providing frequency preset capabilities
[NASA-CASE-XMF-08665] c10 N71-19467

Development and characteristics of burst
synchronization detection system
[NASA-CASE-XMS-05605-1] c10 N71-19468

Development of phase demodulation system with
two phase locked loops
[NASA-CASE-XNP-00777] c10 N71-19469

Diversity receiving system with diversity phase
lock
[NASA-CASE-XGS-01222] c10 N71-20841

Phase locked phase modulation system with
voltage controlled oscillator for final phase
linearity
[NASA-CASE-XNP-05382] c10 N71-23544

Video sync processor with phase locked system
[NASA-CASE-KSC-10002] c10 N71-25865

Characteristics of data-aided carrier tracking
loop used for tracking carrier in angle
modulated communications system
[NASA-CASE-NPO-11282] c10 N73-16205

Filter for third order phase locked loops in
signal receivers
[NASA-CASE-NPO-11941-1] c10 N73-27171

Improved phase lock loop for receiver in
multichannel telemetry system with suppressed
carrier
[NASA-CASE-NPO-11593-1] c07 N73-28012

Automatic carrier acquisition system for phase
locked loop receiver
[NASA-CASE-NPO-11628-1] c07 N73-30113

Phase-locked servo system --- for synchronizing
the rotation of slip ring assembly
[NASA-CASE-MFS-22073-1] c33 N75-13139

Low speed phaselock speed control system --- for
brushless dc motor
[NASA-CASE-GSC-11127-1] c09 N75-24758

Digital phase-locked loop
[NASA-CASE-GSC-11623-1] c33 N75-25040

Telemetry synchronizer
[NASA-CASE-GSC-11868-1] c17 N76-22245

Discriminator aided phase lock acquisition for
suppressed carrier signals
[NASA-CASE-NPO-14311-1] c32 N79-14276

Frequency translating phase conjugation circuit
for active retrodirective antenna array ---
microwave transmission
[NASA-CASE-NPO-14536-1] c32 N81-14185

PN lock indicator for dithered PN code tracking
loop
[NASA-CASE-NPO-14435-1] c33 N81-33405

PHASE MODULATION
Plural channel data transmission system with
quadrature modulation and complementary
demodulation
[NASA-CASE-XAC-06302] c08 N71-19763

Adaptive notch filter, using modulation
techniques for reversed phase noise signal
[NASA-CASE-XMF-01892] c10 N71-22986

Phase locked phase modulation system with
voltage controlled oscillator for final phase
linearity
[NASA-CASE-XNP-05382] c10 N71-23544

Scanning signal phase and amplitude electronic
control device with hybrid T waveguide junction
[NASA-CASE-NPO-10302] c10 N71-26142

Phase modulator with tuned variable length
electrical lines including coupling and
varactor diode circuits
[NASA-CASE-MSC-13201-1] c07 N71-28429

Multicarrier communications system for
transmitting modulated signals from single
transmitter
[NASA-CASE-NPO-11548] c07 N73-26118

Decision feedback loop for tracking a polyphase
modulated carrier
[NASA-CASE-NPO-13103-1] c32 N74-20811

Modulator for tone and binary signals --- phase
of modulation of tone and binary signals on
carrier waves in communication systems
[NASA-CASE-GSC-11743-1] c32 N75-24981

Phase modulating with odd and even finite power
series of a modulating signal
[NASA-CASE-LAR-11607-1] c32 N77-14292

Swept group delay measurement
[NASA-CASE-NPO-13909-1] c33 N78-25319

Quadrature demodulation
[NASA-CASE-GSC-12137-1] c33 N78-32338

Closed Loop solar array-ion thruster system with
power control circuitry
[NASA-CASE-LEW-12780-1] c20 N79-20179

A fiber optic transmission line stabilization
apparatus and method
[NASA-CASE-NPO-15036-1] c74 N80-34250

Receiving and tracking phase modulated signals
[NASA-CASE-MSC-16170-2] c32 N81-16338

Baseband signal combiner for large aperture
antenna array
[NASA-CASE-NPO-14641-1] c32 N81-29308

Doppler radar having phase modulation of both
transmitted and reflected return signals ---
ranging
[NASA-CASE-MSC-18675-1] c32 N81-29312

PHASE SHIFT
Bipolar phase detector and corrector for split
phase FCM data signals
[NASA-CASE-XGS-01590] c07 N71-12392

Left and right hand circular electromagnetic
polarization excitation by phase shifter and
hybrid networks
[NASA-CASE-GSC-10021-1] c09 N71-24595

Pulse code modulated data from frequency
multiplex communications by digital phase
shift or carrier
[NASA-CASE-NPO-11338] c08 N72-25208

Time domain phase measuring apparatus
[NASA-CASE-GSC-12228-1] c33 N79-10338

Phase-angle controller for Stirling engines
[NASA-CASE-NEO-14388-1] c37 N81-17432

PHASE SHIFT CIRCUITS
Design of gyrator circuit using operational
amplifiers to replace ungrounded inductors
[NASA-CASE-XAC-10608-1] c09 N71-12517

Phase shifting circuit for selecting phase of
input signal
[NASA-CASE-ARC-10269-1] c10 N72-16172

Continuously variable, voltage-controlled phase
shifter
[NASA-CASE-NPO-11129] c09 N72-33204

Voltage controlled oscillator circuit for
two-phase induction motor control
[NASA-CASE-MFS-21465-1] c10 N73-32145

Low distortion automatic phase control circuit
--- voltage controlled phase shifter
[NASA-CASE-MFS-21671-1] c33 N74-22885

A fiber optic transmission line stabilization
apparatus and method

- [NASA-CASE-NPO-15036-1] c74 N80-34250
Pseudonoise code tracking loop
[NASA-CASE-MSC-18035-1] c32 N81-15179
- PHASE SHIFT KEYING**
Decision feedback loop for tracking a polyphase modulated carrier
[NASA-CASE-NPO-13103-1] c32 N74-20811
Differential phase shift keyed communication system
[NASA-CASE-MSC-14065-1] c32 N74-26654
Differential phase shift keyed signal resolver
[NASA-CASE-MSC-14066-1] c33 N74-27705
Unbalanced quadriphase demodulator
[NASA-CASE-MSC-14840-1] c32 N77-24331
Method and apparatus for quadriphase-shift-key and linear phase modulation
[NASA-CASE-NPO-14444-1] c33 N81-15192
- PHASE SWITCHING INTERFEROMETERS**
Interferometric tuning acquisition and tracking radar antenna system
[NASA-CASE-XMS-09610] c07 N71-24625
- PHASE TRANSFORMATIONS**
Magnetohydrodynamic generator for mixing nonconductive gas and liquid metal mist to form slugs
[NASA-CASE-XLE-02083] c03 N69-39583
Method and feed system for separating and orienting liquid and vapor phases of liquid propellants in zero gravity environment
[NASA-CASE-XLE-01182] c27 N71-15635
- PHASE VELOCITY**
Ultrasonic calibration device --- for producing changes in acoustic attenuation and phase velocity
[NASA-CASE-LAR-11435-1] c35 N76-15432
- PHASED ARRAYS**
Development of phase control coupling for use with phased array antenna
[NASA-CASE-ERC-10285] c10 N73-16206
Phased array antenna control
[NASA-CASE-MSC-14939-1] c32 N79-11264
Phase conjugation method and apparatus for an active retrodirective antenna array
[NASA-CASE-NPO-13641-1] c32 N79-24210
Complementary cross-slot phased array antenna
[NASA-CASE-MSC-18532-1] c32 N80-29543
Coaxial phased array antenna
[NASA-CASE-MSC-16800-1] c32 N81-14187
- PHASED LOCKED SYSTEMS**
Bit synchronization system using digital data transition tracking phased locked loop
[NASA-CASE-NPO-10844] c07 N72-20140
Digital second-order phase-locked loop
[NASA-CASE-NPO-11905-1] c33 N74-12887
Linear phase demodulator including a phase locked loop with auxiliary feedback loop
[NASA-CASE-GSC-12018-1] c33 N77-14334
- PHENOLIC RESINS**
Bonding method in the manufacture of continuous regression rate sensor devices
[NASA-CASE-LAR-10337-1] c24 N75-30260
- PHENOLS**
Utilization of lithium p-lithiphenoxide to prepare star polymers
[NASA-CASE-NPO-10998-1] c06 N73-32029
Method and device for the detection of phenol and related compounds --- in an electrochemical cell
[NASA-CASE-LEW-12513-1] c25 N79-22235
- PHONOCARDIOGRAPHY**
Phonocardiogram simulator producing electrical voltage waves to control amplitude and duration between simulated sounds
[NASA-CASE-XKS-10804] c05 N71-24606
Vibrophonocardiograph comprising low weight and small volume piezoelectric microphone with amplifier having high input impedance for high sensitivity and low frequency response
[NASA-CASE-XPR-07172] c05 N71-27234
- PHOSPHATES**
Low concentration alkaline solution treatment of aluminum with metal phosphate surface coatings to improve chemical bonding and reduce coating weight
[NASA-CASE-XLA-01995] c18 N71-23047
- PHOSPHAZENES**
Process for the preparation of polycarboranylphosphazenes --- thermal insulation
[NASA-CASE-ARC-11176-2] c27 N81-27271
- PHOSPHINES**
Heat resistant polymers of oxidized styrylphosphine
[NASA-CASE-MSC-14903-1] c27 N78-32256
Compound oxidized styrylphosphine --- flame resistant vinyl polymers
[NASA-CASE-MSC-14903-2] c27 N80-10358
Heat resistant polymers of oxidized styrylphosphine
[NASA-CASE-MSC-14903-3] c27 N80-24438
Phosphorus-containing imide resins
[NASA-CASE-ARC-11368-1] c27 N81-31364
- PHOSPHONITRILES**
Chemical synthesis of thermally stable organometallic polymers with divalent metal ion and tetraphenylphosphonitrilic units
[NASA-CASE-HQN-10364] c06 N71-27363
- PHOSPHORS**
Cathode ray tube with coating of phosphor and cobalt oxides
[NASA-CASE-ERC-10468] c09 N72-20206
- PHOSPHORUS COMPOUNDS**
Phosphorus-containing bisimide resins
[NASA-CASE-ARC-11321-1] c27 N81-27272
- PHOSPHORUS POLYMERS**
Carboranylclotriphosphazenes and their polymers --- thermal insulation
[NASA-CASE-ARC-11176-1] c27 N80-21533
Process for the preparation of polycarboranylphosphazenes --- thermal insulation
[NASA-CASE-ARC-11176-2] c27 N81-27271
- PHOTOABSORPTION**
Photomechanical transducer
[NASA-CASE-NFO-14363-1] c39 N81-25400
- PHOTOCATHODES**
Spectrometer using photoelectric effect to obtain spectral data
[NASA-CASE-XNP-04161] c14 N71-15599
III-V photocathode with nitrogen doping for increased quantum efficiency
[NASA-CASE-NFO-12134-1] c33 N76-31409
- PHOTOCHEMICAL REACTIONS**
Apparatus for photon excited catalysis
[NASA-CASE-NPO-13566-1] c25 N77-32255
Apparatus for extraction and separation of a preferentially photo-dissociated molecular isotope into positive and negative ions by means of an electric field
[NASA-CASE-LEW-12465-1] c25 N78-25148
Violet process for producing flame resistant polyamides and products produced thereby --- protective clothing for high oxygen environments
[NASA-CASE-MSC-16074-1] c27 N80-26446
- PHOTOCONDUCTIVE CELLS**
Two-dimensional radiant energy array computers and computing devices
[NASA-CASE-GSC-11839-1] c60 N77-14751
Plural output optometric sample cell and analysis system
[NASA-CASE-NFO-10233-1] c74 N78-33913
- PHOTOCONDUCTIVITY**
Photofabrication techniques for selective removal of conductive metals oxide coatings from nonconductive substrates
[NASA-CASE-ERC-10108] c06 N72-21094
- PHOTOCONDUCTORS**
Electronic divider and multiplier for analog electric signals
[NASA-CASE-XPR-05637] c09 N71-19480
- PHOTODIODES**
Shock isolator for operating a diode laser on a closed-cycle refrigerator
[NASA-CASE-GSC-12297-1] c37 N79-28549
- PHOTODISSOCIATION**
Apparatus for extraction and separation of a preferentially photo-dissociated molecular isotope into positive and negative ions by means of an electric field
[NASA-CASE-LEW-12465-1] c25 N78-25148
- PHOTOELECTRIC CELLS**
Sun tracker with rotatable plane-parallel plate and two photocells
[NASA-CASE-XGS-01159] c21 N71-10678
Method of and device for determining the characteristics and flux distribution of micrometeorites --- scanning puncture holes in

- sheet material with photoelectric cell
[NASA-CASE-NPO-12127-1] c91 N74-13130
- Noncontacting method for measuring angular deflection
[NASA-CASE-LAR-12178-1] c74 N80-21138
- PHOTOELECTRIC EFFECT**
Spectrometer using photoelectric effect to obtain spectral data
[NASA-CASE-XNP-04161] c14 N71-15599
- PHOTOELECTRIC EMISSION**
High resolution threshold photoelectron spectroscopy by electron attachment
[NASA-CASE-NPO-14078-1] c72 N80-14877
- PHOTOELECTRIC MATERIALS**
Light radiation direction indicator with baffle of two parallel grids
[NASA-CASE-XNP-03930] c14 N69-24331
- Use of thin film light detector
[NASA-CASE-NPO-11432-2] c35 N74-15090
- PHOTOELECTRICITY**
Photoelectric detection system
[NASA-CASE-MFS-23776-1] c74 N80-25134
- PHOTOELECTRON SPECTROSCOPY**
Photoelectron spectrometer with means for stabilizing sample surface potential
[NASA-CASE-NPO-13772-1] c35 N78-10429
- High resolution threshold photoelectron spectroscopy by electron attachment
[NASA-CASE-NPO-14078-1] c72 N80-14877
- Low intensity X-ray and gamma-ray imaging spectrometer
[NASA-CASE-GSC-12587-1] c35 N80-29635
- PHOTOGRAPHIC EMULSIONS**
Method for applying photographic resists to otherwise incompatible substrates
[NASA-CASE-MSC-18107-1] c27 N81-25209
- PHOTOGRAPHIC EQUIPMENT**
Camera protecting device for use in photographing rocket engine nozzles or other engine components
[NASA-CASE-NPO-10174] c14 N71-18465
- Method of treating the surface of a glass member
[NASA-CASE-GSC-12110-1] c27 N77-32308
- Film advance indicator
[NASA-CASE-LAR-12474-1] c35 N80-31774
- System for forming a quadrified image comprising angularly related fields of view of a three dimensional object
[NASA-CASE-NPO-14219-1] c74 N81-17886
- PHOTOGRAPHIC FILM**
Longitudinal film gate and lock mechanism for securing film in motion picture cameras under vibration and high acceleration loads
[NASA-CASE-LAR-10686] c14 N71-28535
- Mechanical exposure interlock device for preventing film overexposure in oscilloscope camera
[NASA-CASE-LAR-10319-1] c14 N73-32322
- Optical noise suppression device and method --- laser light exposing film
[NASA-CASE-MSC-12640-1] c74 N76-31998
- Selective image area control of X-ray film exposure density
[NASA-CASE-NPO-13808-1] c35 N78-15461
- PHOTOGRAPHIC MEASUREMENT**
Photographic method for measuring viscoelastic strain in solid propellants and other materials
[NASA-CASE-XNP-01153] c32 N71-17645
- Impact measuring technique for determining size of hypervelocity projectiles
[NASA-CASE-LAR-10913] c14 N72-16282
- TV fatigue crack monitoring system
[NASA-CASE-LAR-11490-1] c39 N78-16387
- PHOTOGRAPHIC PROCESSING**
Method and apparatus for producing an image from a transparent object
[NASA-CASE-GSC-11989-1] c74 N77-28932
- Method of obtaining intensified image from developed photographic films and plates
[NASA-CASE-MFS-23461-1] c35 N79-10389
- PHOTOGRAPHIC PROCESSING EQUIPMENT**
Drying chamber for photographic sheet material
[NASA-CASE-GSC-11074-1] c14 N73-28489
- PHOTOGRAPHIC RECORDING**
Photographing surface flow patterns on wind tunnel test models
[NASA-CASE-XLA-01353] c14 N70-41366
- Development of focused image holography with extended sources
[NASA-CASE-ERC-10019] c16 N71-15551
- Recording and reconstructing focused image holograms
[NASA-CASE-ERC-10017] c16 N71-15567
- Method and means for recording and reconstructing holograms without use of reference beam
[NASA-CASE-ERC-10020] c16 N71-26154
- Multiple image storing system for obtaining holographic record on film of high speed projectile
[NASA-CASE-MFS-20596] c14 N72-17324
- Phototropic composition of matter with sensitivity to ultraviolet light and usable for producing positive photographic images
[NASA-CASE-XGS-03736] c14 N72-22443
- Method for determining thermo-physical properties of specimens --- photographic recording of changes in thin film phase-change temperature indicating material in wind tunnel
[NASA-CASE-LAR-11053-1] c25 N74-18551
- PHOTOGRAPHY**
System for forming a quadrified image comprising angularly related fields of view of a three dimensional object
[NASA-CASE-NPO-14219-1] c74 N81-17886
- PHOTOINTERPRETATION**
Constant magnification optical tracking system
[NASA-CASE-NFO-14813-1] c74 N80-24152
- PHOTOIONIZATION**
Multichannel photoionization chamber for measuring absorption, photoionization yield, and coefficients of gases
[NASA-CASE-ERC-10044-1] c14 N71-27090
- PHOTOLYSIS**
Solar photolysis of water
[NASA-CASE-NPO-13675-1] c44 N77-32580
- Solar photolysis of water
[NASA-CASE-NPO-14126-1] c44 N79-11470
- PHOTOMAPPING**
Window defect planar mapping technique
[NASA-CASE-MSC-19442-1] c74 N77-10899
- PHOTOMASKS**
Method for applying photographic resists to otherwise incompatible substrates
[NASA-CASE-MSC-18107-1] c27 N81-25209
- PHOTOMECHANICAL EFFECT**
Photomechanical transducer
[NASA-CASE-NPO-14363-1] c39 N81-25400
- PHOTOMETERS**
Michelson interferometer with photodetector for optical direction sensing
[NASA-CASE-NPO-10320] c14 N71-17655
- Indicator device for monitoring charge of wet cell battery, using semiconductor light emitter and photodetector
[NASA-CASE-NPO-10194] c03 N71-20407
- Electro-optical detector for determining position of light source
[NASA-CASE-XNP-01059] c23 N71-21821
- Photometric flow meter with comparator reference means
[NASA-CASE-XGS-01331] c14 N71-22996
- Development of radiant energy sensor to detect the radiant energy wavelength bands from portions of radiating body
[NASA-CASE-ERC-10174] c14 N72-25409
- Characteristics of infrared photodetectors manufactured from semiconductor material irradiated by electron beam
[NASA-CASE-LAR-10728-1] c14 N73-12445
- Chromato-fluorographic drug detector --- device for detecting and recording fluorescent properties of materials
[NASA-CASE-ABC-10633-1] c25 N74-26947
- The 2 deg/90 deg laboratory scattering photometer --- particulate refractivity in hydrosols
[NASA-CASE-GSC-12088-1] c74 N78-13874
- Magneto-optic detection system with noise cancellation
[NASA-CASE-NPO-11954-1] c35 N78-29421
- PHOTOMICROGRAPHY**
Stereo photomicrography system with stereo microscope for viewing specimen at various magnifications
[NASA-CASE-LAR-10176-1] c14 N72-20380
- Hand-held, lightweight, portable photomicroscope
[NASA-CASE-ABC-10468-1] c14 N73-33361

PHOTOMULTIPLIER TUBES

- Photomultiplier detector of Canopus for spacecraft attitude control
[NASA-CASE-XNP-03914] c21 N71-10771
- Electronic divider and multiplier for analog electric signals
[NASA-CASE-XFR-05637] c09 N71-19480
- Apparatus for detecting particle emission lower than noise level of multiplier tube
[NASA-CASE-XLA-07813] c14 N72-17328
- Scan oscilloscope for mapping surface sensitivity of photomultiplier tube
[NASA-CASE-LAR-10320-1] c09 N72-23172
- Design and development of light sensing device for controlling orientation of object relative to sun or other light source
[NASA-CASE-NPO-11201] c14 N72-27409
- Photomultiplier circuit including means for rapidly reducing the sensitivity thereof --- and protection from radiation damage
[NASA-CASE-ARC-10593-1] c33 N74-27682

PHOTON BEAMS

- Apparatus for photon excited catalysis
[NASA-CASE-NPO-13566-1] c25 N77-32255

PHOTONS

- Solar cell collector
[NASA-CASE-LEW-12552-1] c44 N78-25527

PHOTOSENSITIVITY

- Photosensitive light source device for detecting unmanned spacecraft deviation from reference attitude
[NASA-CASE-XNP-00438] c21 N70-35089
- Light sensitive control system for automatically opening and closing dome of solar optical telescope
[NASA-CASE-MSC-10966] c14 N71-19568
- Scan oscilloscope for mapping surface sensitivity of photomultiplier tube
[NASA-CASE-LAR-10320-1] c09 N72-23172
- Holography utilizing surface plasmon resonances
[NASA-CASE-MFS-22040-1] c35 N74-26946
- Apparatus for calibrating an image dissector tube
[NASA-CASE-MFS-22208-1] c33 N75-26244

PHOTOTRANSISTORS

- Phototransistor imaging system with mosaic of phototransistors on semiconductor substrate
[NASA-CASE-MFS-20809] c23 N73-13660
- Phototransistor with base collector junction diode for integration into photo sensor arrays
[NASA-CASE-MFS-20407] c09 N73-19235

PHOTOTROPISM

- Phototropic composition of matter with sensitivity to ultraviolet light and usable for producing positive photographic images
[NASA-CASE-XGS-03736] c14 N72-22443

PHOTOVISCOELASTICITY

- Photographic method for measuring viscoelastic strain in solid propellants and other materials
[NASA-CASE-XNP-01153] c32 N71-17645

PHOTOVOLTAIC CELLS

- Sensor consisting of photocells mounted on pyramidal base for improved pointing accuracy of planetary trackers
[NASA-CASE-XNP-04180] c07 N69-39736
- Light sensitive digital aspect sensor for attitude control of earth satellites or space probes
[NASA-CASE-XGS-00359] c14 N70-34158
- Method of producing output voltage from photovoltaic cell using poly-N-vinyl carbazole complexed with iodine
[NASA-CASE-NPO-10373] c03 N71-18658
- Use of thin film light detector
[NASA-CASE-NPO-11432-2] c35 N74-15090
- Photovoltaic cell array
[NASA-CASE-MFS-22458-1] c44 N77-10635
- Solar cells having integral collector grids
[NASA-CASE-LEW-12819-1] c44 N79-11467
- Double-sided solar cell package
[NASA-CASE-NPO-14199-1] c44 N79-25482
- Method of construction of a multi-cell solar array
[NASA-CASE-MFS-23540-1] c44 N79-26475
- Solar cell with improved N-region contact and method of forming the same
[NASA-CASE-NPO-14205-1] c44 N79-31752
- Method of fabricating a photovoltaic module of a substantially transparent construction
[NASA-CASE-NPO-14303-1] c44 N80-18550

- Improving the efficiency of silicon solar cells containing chromium
[NASA-CASE-NPO-15179-1] c44 N80-32850
- Miniature spectrally selective dosimeter
[NASA-CASE-LAR-12469-1] c35 N81-12388
- High voltage planar multijunction --- solar cells
[NASA-CASE-LEW-13400-1] c44 N81-16528
- High voltage V-groove solar cell
[NASA-CASE-LEW-13401-1] c44 N81-16529
- Copper doped polycrystalline silicon solar cell
[NASA-CASE-NPO-14670-1] c44 N81-19558

PHOTOVOLTAIC EFFECT

- Semiconductor in resonant cavity for improving signal to noise ratio of communication receiver
[NASA-CASE-MSC-12259-1] c07 N70-12616
- Use of thin film light detector
[NASA-CASE-NPO-11432-2] c35 N74-15090
- Heat transparent high intensity high efficiency solar cell
[NASA-CASE-LEW-12892-1] c44 N81-27598

PHYSICAL EXERCISE

- Development of restraint system for securing personnel to ergometer while exercising under weightless conditions
[NASA-CASE-MFS-21046-1] c14 N73-27377
- Tilting table for testing human body in variety of positions while exercising on ergometer or other biomedical devices
[NASA-CASE-MFS-21010-1] c05 N73-30078
- Manual actuator --- for spacecraft exercising machines
[NASA-CASE-MFS-21481-1] c37 N74-18127
- Therapeutic hand exerciser
[NASA-CASE-LAR-11667-1] c52 N76-19785

PHYSICAL PROPERTIES

- Chemical and physical properties of synthetic polyurethane polymer prepared by reacting hydroxy carbonate with organic diisocyanate
[NASA-CASE-MFS-10512] c06 N73-30099
- System for monitoring physical characteristics of fluids --- acoustic techniques
[NASA-CASE-NPO-15400-1] c34 N81-24384

PHYSIOLOGICAL EFFECTS

- Restraint torso for increased mobility and reduced physiological effects while wearing pressurized suits
[NASA-CASE-MSC-12397-1] c05 N72-25119

PHYSIOLOGICAL TESTS

- Vibrophonocardiograph comprising low weight and small volume piezoelectric microphone with amplifier having high input impedance for high sensitivity and low frequency response
[NASA-CASE-XFR-07172] c05 N71-27234
- Medical subject monitoring systems --- multichannel monitoring systems
[NASA-CASE-MSC-14180-1] c52 N76-14757

PHYSIOLOGY

- Piezoelectric transducer for monitoring sound waves of physiological origin
[NASA-CASE-XMS-05365] c14 N71-22993
- Method of detecting and counting bacteria
[NASA-CASE-GSC-11917-2] c51 N76-29891

PIERCING

- Pressurized cell micrometeoroid detector
[NASA-CASE-XLA-00936] c14 N71-14996

PIEZOELECTRIC CRYSTALS

- Miniature solid state, direction sensitive, stress transducer design with bonded semiconductive piezoresistive element for sensing residual stresses
[NASA-CASE-XNP-02983] c14 N71-21091
- Ultra-stable oscillator with complementary transistors
[NASA-CASE-GSC-11513-1] c33 N74-20862
- CDS solid state phase insensitive ultrasonic transducer --- annealing cadmium sulfide crystals
[NASA-CASE-LAR-12304-1] c35 N80-20559

PIEZOELECTRIC TRANSDUCERS

- Piezoelectric transducer for detecting and measuring micrometeoroids
[NASA-CASE-XAC-01101] c14 N70-41957
- Describing crystal oscillator instrument for detecting condensable gas contaminants in vacuum apparatus
[NASA-CASE-NPO-10144] c14 N71-17701
- Piezoelectric transducer for monitoring sound waves of physiological origin
[NASA-CASE-XMS-05365] c14 N71-22993

- Miniature piezjunction semiconductor transducer with in situ stress coupling
[NASA-CASE-ERC-10087-2] c14 N72-31446
- Length mode piezoelectric ultrasonic transducer for inspection of solid objects
[NASA-CASE-MSC-15672-1] c38 N79-14398
- PIEZOELECTRICITY**
- Piezoelectric means for missile stage separation indication and stage initiation
[NASA-CASE-XLA-00791] c03 N70-39930
- Piezoelectric pump for supplying fluid at high frequencies to gyroscope fluid suspension system
[NASA-CASE-XNP-05429] c26 N71-21824
- Miniature electromechanical junction transducer operating on piezjunction effect and utilizing epoxy for stress coupling component
[NASA-CASE-ERC-10087] c14 N71-27334
- PIEZORESISTIVE TRANSDUCERS**
- Miniature solid state, direction sensitive, stress transducer design with bonded semiconductive piezoresistive element for sensing residual stresses
[NASA-CASE-XNP-02983] c14 N71-21091
- Solid state force measuring electromechanical transducers made of piezoresistive materials
[NASA-CASE-ERC-10088] c26 N71-25490
- PIGMENTS**
- Binder stabilized zinc oxide pigmented coating for spacecraft thermal control
[NASA-CASE-XMF-07770-2] c18 N71-26772
- PILOT ERROR**
- Spectrally balanced chromatic landing approach lighting system
[NASA-CASE-ARC-10990-1] c04 N77-12031
- PILOT TRAINING**
- Controlled visibility device for simulating poor visibility conditions in training pilots in instrument landing and flight procedures
[NASA-CASE-XPR-04147] c11 N71-10748
- Kinesthetic control simulator --- for pilot training
[NASA-CASE-LAR-10276-1] c09 N75-15662
- PILOTS (PERSONNEL)**
- Pilot warning indicator system of intruder aircraft
[NASA-CASE-ERC-10226-1] c14 N73-16483
- PINCH EFFECT**
- Toggle mechanism for pinching metal tubes
[NASA-CASE-GSC-12274-1] c37 N75-28550
- PINS**
- Fatigue resistant shear pin with hollow shaft and two plugs
[NASA-CASE-XLA-09122] c15 N69-27505
- Blade vibration damping pins for turbomachinery
[NASA-CASE-XLE-00155] c28 N71-29154
- Design of quick release locking pin for joining two or more load-carrying structural members
[NASA-CASE-MFS-18495] c15 N72-11385
- PINTLES**
- Describing metal valve pintle with encapsulated elastomeric body
[NASA-CASE-MSC-12116-1] c15 N71-17648
- PIPE FLOW**
- Flat-plate heat pipe
[NASA-CASE-GSC-11998-1] c34 N77-32413
- PIPELINES**
- Flexible bellows joint shielding sleeve for propellant transfer pipelines
[NASA-CASE-XNP-01855] c15 N71-28537
- PIPES (TUBES)**
- Capacitance measuring device for determining flare accuracy on tapered tubes
[NASA-CASE-XKS-03495] c14 N69-39785
- Low thermal loss piping arrangement for moving cryogenic media through double chamber structure
[NASA-CASE-XNP-08882] c15 N69-39935
- Foldable conduit capable of springing back as self erecting structural member
[NASA-CASE-XLE-00620] c32 N70-41579
- Mounting fixture for supporting thermobulb in pipeline
[NASA-CASE-NPO-10158] c33 N71-16356
- Method and apparatus for shaping and joining large diameter metal tubes using magnetomotive forces
[NASA-CASE-XMF-05114] c15 N71-17650
- Sealed separable connection for thin wall metal tube
[NASA-CASE-NPO-10064] c15 N71-17693
- Electrical switching device comprising conductive liquid confined within square loop of deformable nonconductive tubing also used for leveling
[NASA-CASE-NPO-10037] c09 N71-19610
- Hand tool for forming dimples and nipples on end portion of tubes
[NASA-CASE-XMS-06876] c15 N71-21536
- Nonconductive tube as feed system for plasma thruster
[NASA-CASE-XLE-02902] c25 N71-21694
- Apparatus and method for spin forming tubular elbows with high strength, uniform thickness, and close tolerances
[NASA-CASE-XMF-01083] c15 N71-22723
- Description of portable milling tool for milling tube or pipe ends to desired shape and thickness
[NASA-CASE-XMF-03511] c15 N71-22799
- Gage for measuring internal angle of flare on end of tube
[NASA-CASE-XMF-04415] c14 N71-24693
- Method and apparatus for portable high precision magnetomotive bulging, constricting, and joining of large diameter metal tubes
[NASA-CASE-XMF-05114-3] c15 N71-24865
- Portable cutting machine for piping weld preparation
[NASA-CASE-XKS-07953] c15 N71-26134
- Method and apparatus for precision sizing and joining of large diameter tubes by bulging or constricting overlapping ends
[NASA-CASE-XMF-05114-2] c15 N71-26148
- Collapsible antenna boom and coaxial transmission line having inflatable inner tube
[NASA-CASE-MFS-20068] c07 N71-27191
- Process for developing filament reinforced plastic tubes used in research and development programs
[NASA-CASE-LAR-10203-1] c15 N72-16330
- Torsional disconnect device for releasably coupling distal ends of fluid conduits
[NASA-CASE-NPO-10704] c15 N72-20445
- Open type urine receptacle with tubular housing
[NASA-CASE-MSC-12324-1] c05 N72-22093
- Measuring method for cutaneous perception using instrument with elongated tubular housing
[NASA-CASE-MSC-13609-1] c05 N72-25122
- Low mass truss structure with elongated thin-walled tubular segments
[NASA-CASE-LAR-10546-1] c11 N72-25287
- Honeycomb panels of minimal surface, periodic tubule layers
[NASA-CASE-ERC-10364] c18 N72-25540
- Honeycomb core structures of minimum surface tubule sections
[NASA-CASE-ERC-10363] c18 N72-25541
- U shaped heated tube for distillation and purification of liquid metals
[NASA-CASE-XNP-08124-2] c06 N73-13129
- Cable guide and restraint device for reefing tubes in uniform manner
[NASA-CASE-LAR-10129-1] c15 N73-25512
- Twisted wire or tube superconductor for filament windings
[NASA-CASE-LEW-11015] c26 N73-32571
- Open tube guideway for high speed air cushioned vehicles
[NASA-CASE-LAR-10256-1] c85 N74-34672
- Method for fabricating a mass spectrometer inlet leak
[NASA-CASE-GSC-12077-1] c35 N77-24455
- Precision heat forming of tetrafluoroethylene tubing
[NASA-CASE-MSC-18430-1] c31 N80-17292
- Open ended ratchet type tubing cutter
[NASA-CASE-MSC-18538-1] c37 N80-22703
- PISTON ENGINES**
- Stirling cycle engine and refrigeration systems
[NASA-CASE-NPO-13613-1] c37 N76-29590
- Solar engine --- Flat plate type
[NASA-CASE-LAR-12148-1] c44 N79-29608
- A gas-to-hydraulic power converter
[NASA-CASE-MSC-18794-1] c37 N81-24445
- Hot gas engine with dual crankshafts
[NASA-CASE-NPO-14221-1] c37 N81-25370
- PISTONS**
- Automatically reciprocating, high pressure pump for use in spacecraft cryogenic propellants
[NASA-CASE-XNP-04731] c15 N71-24042

- Pumping and metering dual piston system and monitor for reaction chamber constituents
[NASA-CASE-GSC-10218-1] c15 N72-21465
- Collapsible piston for hypervelocity gun
[NASA-CASE-MSC-13789-1] c11 N73-32152
- Airflow control system for supersonic inlets
[NASA-CASE-LEW-11188-1] c02 N74-20646
- Centrifugal-reciprocating compressor
[NASA-CASE-NPO-14597-1] c37 N79-23431
- Free-piston regenerative hot gas hydraulic engine
[NASA-CASE-LEW-12274-1] c37 N80-31790
- Power control for hot gas engines
[NASA-CASE-NPO-14220-1] c37 N81-14318
- Multiple plate hydrostatic viscous damper
[NASA-CASE-LEW-12445-1] c37 N81-22360
- PITCH (INCLINATION)**
- Reverse pitch fan with divided splitter
[NASA-CASE-LEW-12760-1] c07 N77-17059
- Velocity vector control system augmented with direct lift control
[NASA-CASE-LAR-12268-1] c08 N81-24106
- Pitch attitude stabilization system utilizing engine pressure ratio feedback signals
[NASA-CASE-LAR-12562-1] c08 N81-26152
- PIVOTS**
- Apparatus for measuring load on cable under static or dynamic conditions comprising pulleys pivoting structure against restraint of tension strap
[NASA-CASE-XMS-04545] c15 N71-22678
- Unidirectional flexural pivot
[NASA-CASE-GSC-12622-1] c37 N81-22359
- PLANAR STRUCTURES**
- Window defect planar mapping technique
[NASA-CASE-MSC-19442-1] c74 N77-10899
- Method and apparatus for preparing multiconductor cable with flat conductors
[NASA-CASE-MFS-10946-1] c31 N79-21226
- High voltage planar multijunction --- solar cells
[NASA-CASE-LEW-13400-1] c44 N81-16528
- PLANE WAVES**
- Characteristics of microwave antenna with conical reflectors to generate plane wave front
[NASA-CASE-NPO-11661] c07 N73-14130
- PLANETARY ATMOSPHERES**
- Planetary atmospheric investigation using split trajectory dual flyby mode
[NASA-CASE-XAC-08494] c30 N71-15990
- Wind tunnel method for simulating flow fields around blunt vehicles entering planetary atmospheres without involving high temperatures
[NASA-CASE-LAR-11138] c12 N71-20436
- Ablation sensor for measuring surface ablation rate of material on vehicles entering earth's atmosphere on entry into planetary atmospheres
[NASA-CASE-XLA-01791] c14 N71-22991
- PLANETARY GRAVITATION**
- Lunar and planetary gravity simulator to test vehicular response to landing
[NASA-CASE-XLA-00493] c11 N70-34786
- Table structure and rotating magnet system simulating gravitational forces on spacecraft and displaying trajectories between Earth, Venus, and Mercury
[NASA-CASE-XNP-00708] c14 N70-35394
- PLANETARY LANDING**
- Multiple parachute system for landing control of Apollo type spacecraft
[NASA-CASE-XLA-06898] c02 N70-36804
- Payload soft landing system using stowable gas bag
[NASA-CASE-XLA-09881] c31 N71-16085
- PLANETARY ORBITS**
- Self-erectable space structures of flexible foam for application in planetary orbits
[NASA-CASE-XLA-00686] c31 N70-34135
- Manned space station collapsible for launching and self-erectable in orbit
[NASA-CASE-XLA-00678] c31 N70-34296
- PLANETARY RADIATION**
- Attitude sensor with scanning mirrors for detecting orientation of space vehicle with respect to planet
[NASA-CASE-XLA-00793] c21 N71-22880
- PLANETARY SURFACES**
- Spacecraft transponder and ground station radar system for mapping planetary surfaces
[NASA-CASE-NPO-11001] c07 N72-21118
- PLANTS (BOTANY)**
- Rotary plant growth accelerating apparatus --- weightlessness
[NASA-CASE-ARC-10722-1] c51 N75-25503
- Molten salt pyrolysis of latex --- synthetic hydrocarbon fuel production using the Guayule shrub
[NASA-CASE-NFO-14315-1] c27 N81-17261
- Enhancement of in vitro Guayule propagation
[NASA-CASE-NPO-15213-1] c51 N81-29728
- PLASMA ACCELERATION**
- Increasing available power per unit area in ion rocket engine by increasing beam density
[NASA-CASE-XLE-00519] c28 N70-41576
- Coaxial, high density, hypervelocity plasma generator and accelerator using electrodes
[NASA-CASE-MFS-20589] c25 N72-32688
- PLASMA ACCELERATORS**
- Crossed-field plasma accelerator for laboratory simulation of atmospheric reentry conditions
[NASA-CASE-XLA-00675] c25 N70-33267
- Continuous operation, single phased, induction plasma accelerator producing supersonic speeds
[NASA-CASE-XLA-01354] c25 N70-36946
- Crossed field MHD plasma generator-accelerator
[NASA-CASE-XLA-03374] c25 N71-15562
- Direct current powered self repeating plasma accelerator with interconnected annular and linear discharge channels
[NASA-CASE-XLA-03103] c25 N71-21693
- Magnetically controlled plasma accelerator capable of ignition in low density gaseous environment
[NASA-CASE-XLA-00327] c25 N71-29184
- Two stage light gas-plasma projectile accelerator
[NASA-CASE-MFS-22287-1] c75 N76-14931
- PLASMA CONTROL**
- Superconducting magnetic field trapping device for producing magnetic field in air
[NASA-CASE-XNP-01185] c26 N73-28710
- Self-energized plasma compressor --- for compressing plasma discharged from coaxial plasma generator
[NASA-CASE-MFS-22145-1] c75 N75-13625
- PLASMA CYLINDERS**
- Plasma-fluidic hybrid display system combining high brightness and memory characteristics
[NASA-CASE-ERC-10100] c09 N71-33519
- PLASMA DENSITY**
- Apertured electrode focusing system for ion sources with nonuniform plasma density
[NASA-CASE-XNP-03332] c09 N71-10618
- Measurement of plasma temperature and density using radiation absorption
[NASA-CASE-ARC-10598-1] c75 N74-30156
- PLASMA DIAGNOSTICS**
- Plasma probes having guard ring and primary sensor at same potential to prevent stray wall current collection in ionized gases
[NASA-CASE-XLE-00690] c25 N69-39884
- Apparatus for measuring conductivity and velocity of plasma with multiple sensing coils positioned in plasma
[NASA-CASE-XAC-05695] c25 N71-16073
- Measurement of plasma temperature and density using radiation absorption
[NASA-CASE-ARC-10598-1] c75 N74-30156
- PLASMA DYNAMICS**
- Apparatus for measuring conductivity and velocity of plasma with multiple sensing coils positioned in plasma
[NASA-CASE-XAC-05695] c25 N71-16073
- Self-energized plasma compressor --- for compressing plasma discharged from coaxial plasma generator
[NASA-CASE-MFS-22145-1] c75 N75-13625
- PLASMA ENGINES**
- Nonconductive tube as feed system for plasma thruster
[NASA-CASE-XLE-02902] c25 N71-21694
- PLASMA GENERATORS**
- Apparatus for producing highly conductive, high temperature electron plasma with homogenous temperature and pressure distribution
[NASA-CASE-XLA-00147] c25 N70-34661
- Crossed field MHD plasma generator-accelerator
[NASA-CASE-XLA-03374] c25 N71-15562
- Coaxial, high density, hypervelocity plasma generator and accelerator using electrodes
[NASA-CASE-MFS-20589] c25 N72-32688

Self-energized plasma compressor --- for compressing plasma discharged from coaxial plasma generator
[NASA-CASE-MPS-22145-1] c75 N75-13625

Self-energized plasma compressor
[NASA-CASE-MPS-22145-2] c75 N76-17551

Continuous plasma laser --- method and apparatus for producing intense, coherent, monochromatic light from low temperature plasma
[NASA-CASE-XNP-04167-3] c36 N77-19416

PLASMA GUNS

Plasma spraying gun for forming diffusion bonded metal or ceramic coatings on substrates
[NASA-CASE-XLE-01604-2] c15 N71-15610

PLASMA JETS

Method of preparing water purification membranes --- polymerization of allyl amine as thin films in plasma discharge
[NASA-CASE-ARC-10643-1] c25 N75-12087

Combination automatic-starting electrical plasma torch and gas shutoff valve --- for satellite attitude control
[NASA-CASE-XLE-10717] c37 N75-29426

Plasma cleaning device --- designed for high vacuum environments
[NASA-CASE-MPS-22906-1] c75 N78-27913

PLASMA LAYERS

Electrostatic modulator for communicating through plasma sheath formed around spacecraft during reentry
[NASA-CASE-XLA-01400] c07 N70-41331

Method and apparatus for communicating through ionized layer of gases surrounding spacecraft during reentry into planetary atmospheres
[NASA-CASE-XLA-01127] c07 N70-41372

Reentry communication by injection of water droplets into plasma layer surrounding space vehicle
[NASA-CASE-XLA-01552] c07 N71-11284

PLASMA LOSS

Improved thermionic energy converters
[NASA-CASE-LEW-12443-1] c44 N81-19561

PLASMA POTENTIALS

Method and apparatus for neutralizing potentials induced on spacecraft surfaces
[NASA-CASE-GSC-11963-1] c33 N77-10429

PLASMA PROBES

Plasma probes having guard ring and primary sensor at same potential to prevent stray wall current collection in ionized gases
[NASA-CASE-XLE-00690] c25 N69-39884

Small plasma probe using tungsten wire collector in tubular shield
[NASA-CASE-XLE-02578] c25 N71-20747

PLASMA PROPULSION

Method of making dished ion thruster grids
[NASA-CASE-LEW-11694-1] c20 N75-18310

PLASMA RADIATION

Development of method for measuring electron density gradients of plasma sheath around space vehicle during atmospheric entry
[NASA-CASE-XLA-06232] c25 N71-20563

Apparatus for producing monochromatic light from continuous plasma source
[NASA-CASE-XNP-04167-2] c25 N72-24753

PLASMA SHEATHS

Space environment simulation system for measuring spacecraft electric field strength in plasma sheath
[NASA-CASE-XLE-02038] c09 N71-16086

Development of method for measuring electron density gradients of plasma sheath around space vehicle during atmospheric entry
[NASA-CASE-XLA-06232] c25 N71-20563

PLASMA SPRAYING

Flame or plasma spraying for molybdenum coating of carbon or graphite surfaces to prevent oxidative corrosion
[NASA-CASE-XLA-00302] c15 N71-16077

Improved refractory coatings and method of producing the same
[NASA-CASE-LEW-13169-1] c26 N80-14232

Fully plasma-sprayed compliant laced ceramic turbine seal
[NASA-CASE-LEW-13268-1] c37 N80-24619

PLASMA TEMPERATURE

Measurement of plasma temperature and density using radiation absorption
[NASA-CASE-ARC-10598-1] c75 N74-30156

PLASMA-ELECTROMAGNETIC INTERACTION

Plasma igniter for internal combustion engine
[NASA-CASE-NPO-13828-1] c37 N79-11405

PLASMAS (PHYSICS)

Apparatus for measuring conductivity and velocity of plasma with multiple sensing coils positioned in plasma
[NASA-CASE-XAC-05695] c25 N71-16073

PLASTIC COATINGS

Process permitting application of synthetic resin coating to irregular-shaped objects at ambient temperature
[NASA-CASE-XNP-06508] c18 N69-39895

Development and characteristics of system for skin packaging articles using thermoplastic film heating and vacuum operated equipment
[NASA-CASE-MPS-20855] c15 N73-27405

Silicon nitride coated, plastic covered solar cell
[NASA-CASE-LEW-11496-1] c44 N77-14580

Oxygen post-treatment of plastic surface coated with plasma polymerized silicon-containing monomers
[NASA-CASE-ARC-10915-2] c27 N79-18052

Flexible formulated plastic separators for alkaline batteries
[NASA-CASE-LEW-12363-4] c44 N80-18555

PLASTIC DEFORMATION

Process for analysis of strain field of structures subjected to large deformations involving low modulus substrate with thin coating
[NASA-CASE-LAR-10765-1] c32 N73-20740

Mechanical bonding of metal
[NASA-CASE-LEW-12941-1] c31 N81-16329

PLASTIC TAPES

Development of flexible thermocouple in form of tape for adaptation to special temperature measuring conditions
[NASA-CASE-LEW-11072-1] c14 N73-24472

PLASTICIZERS

Inorganic-organic separators for alkaline batteries
[NASA-CASE-LEW-12649-1] c44 N78-25530

Method of bonding plasticized elastomer to metal and article produced thereby
[NASA-CASE-MPS-25181-1] c27 N81-16238

Advanced inorganic separators for alkaline batteries and method of making same --- a polymeric coating applied to a porous flexible substrate
[NASA-CASE-LEW-13171-1] c44 N81-22466

Tackifier for addition polyimides containing monoethylphthalate
[NASA-CASE-LAR-12642-1] c27 N81-29229

PLASTICS

Hot forming of plastic sheets
[NASA-CASE-XMS-05516] c15 N71-17803

Technique for making foldable, inflatable, plastic honeycomb core panels for use in building and bridge structures, light and radio wave reflectors, and spacecraft
[NASA-CASE-XLA-03492] c15 N71-22713

Electrode sealing and insulation for fuel cells containing caustic liquid electrolytes using powdered plastic and metal
[NASA-CASE-XMS-01625] c15 N71-23022

Dielectric apparatus for heating, fusing, and hardening of organic matrix to form plastic material into shaped product
[NASA-CASE-LAR-10121-1] c15 N71-26721

Plastic sphere for radar tracking and calibration
[NASA-CASE-XLA-11154] c07 N72-21117

Molding apparatus --- for thermosetting plastic compositions
[NASA-CASE-LAR-10489-2] c31 N74-32920

Ultraviolet and thermally stable polymer compositions
[NASA-CASE-ARC-10592-2] c27 N76-32315

Abrasion resistant coatings for plastic surfaces
[NASA-CASE-ARC-10915-3] c24 N77-24200

Precision heat forming of tetrafluoroethylene tubing
[NASA-CASE-MSC-18430-1] c31 N80-17292

PLATES

Compression test fixture
[NASA-CASE-MSC-18723-1] c39 N81-24470

PLATES (STRUCTURAL MEMBERS)

Foil seal between parts moving relative to each other

[NASA-CASE-XLE-05130] c15 N69-21362
 Fifth wheel
 [NASA-CASE-FRC-10081-1] c37 N77-14477
 Microwave dichroic plate
 [NASA-CASE-GSC-12171-1] c33 N79-28416
 Floating nut retention system
 [NASA-CASE-MSC-16938-1] c37 N80-23653
PLATING
 Selective plating of etched circuits without removing previous plating
 [NASA-CASE-XGS-03120] c15 N71-24047
 Metal plating process employing spraying of metallic power/peening particle mixture
 [NASA-CASE-GSC-11163-1] c15 N73-32360
 Scanning nozzle plating system --- for etching or plating metals on substrates without masking
 [NASA-CASE-NPO-11758-1] c31 N74-23665
PLATINUM
 Electrolytic cell structure
 [NASA-CASE-LAR-11042-1] c33 N75-27252
 Platinum resistance thermometer circuit
 [NASA-CASE-MSC-12327-1] c35 N77-27368
PLAYBACKS
 Method of and means for testing a tape record/playback system
 [NASA-CASE-MFS-22671-2] c35 N77-17426
 Thermomagnetic recording and magnetic-optic playback system
 [NASA-CASE-NPO-10872-1] c35 N79-16246
PLENUM CHAMBERS
 Platform with several ground effect pads and plenum chambers
 [NASA-CASE-MFS-14685] c31 N71-15689
 Development of filter apparatus for gas separation and characteristics of filter cell support frame for improved operation
 [NASA-CASE-MSC-12297] c14 N72-23457
 Micro-fluid exchange coupling apparatus
 [NASA-CASE-ABC-11114-1] c51 N81-14605
PLETHYSMOGRAPHY
 Readout electrode assembly for measuring biological impedance
 [NASA-CASE-ABC-10816-1] c35 N76-24525
 Apparatus for determining changes in limb volume
 [NASA-CASE-MSC-18759-1] c52 N81-24716
PLOTTERS
 Plotter device for automatically drawing equipotential lines on sheet of resistance paper
 [NASA-CASE-NPO-11134] c09 N72-21246
 Apparatus and method for determining the position of a radiant energy source
 [NASA-CASE-GSC-12147-1] c32 N81-27341
PLOTTING
 Instrument for measuring potentials on two dimensional electric field plot
 [NASA-CASE-XLA-08493] c10 N71-19421
PLUG NOZZLES
 Cascade plug nozzle --- for jet noise reduction
 [NASA-CASE-LAR-11674-1] c67 N76-18117
PLUGS
 Rocket chamber leak test fixture using tubular plug
 [NASA-CASE-XPR-09479] c14 N69-27503
 Fatigue resistant shear pin with hollow shaft and two plugs
 [NASA-CASE-XLA-09122] c15 N69-27505
 Control of gas flow from pressurized vessel by thermal expansion of metal plug
 [NASA-CASE-NPO-10298] c12 N71-17661
 Heated porous plug microthruster for spacecraft reaction jet controlled systems such as fuel flow regulation, propellant disassociation, and heat transfer augmentation
 [NASA-CASE-GSC-10640-1] c28 N72-18766
 High temperature penetrator assembly with bayonet plug and ramp-activated lock
 [NASA-CASE-MSC-18526-1] c35 N80-19468
PNEUMATIC CONTROL
 Pneumatic system for cyclic control of fluid flow in pneumatic device
 [NASA-CASE-XMS-04843] c03 N69-21469
 Pneumatic control of telescopic mirror support system
 [NASA-CASE-XLA-03271] c11 N69-24321
 Actuator using compressed gas as driving force to control valve handling large liquid flows
 [NASA-CASE-XHQ-01208] c15 N70-35409
 Pneumatic mechanism for releasing hook and loop fasteners between large rigid structures

[NASA-CASE-XMS-10660-1] c15 N71-25975
 Pneumatic foot pedal operated fluidic exercising device
 [NASA-CASE-MSC-11561-1] c05 N73-32014
 Pneumatic load compensating or controlling system
 [NASA-CASE-ABC-10907-1] c37 N75-32465
PNEUMATIC EQUIPMENT
 Development and characteristics of high pressure control valve
 [NASA-CASE-MSC-11010] c15 N71-19485
 Pneumatic cantilever beams and platform for space erectable structure
 [NASA-CASE-XLA-01731] c32 N71-21045
 Fluid transferring system design for purging toxic, corrosive, or noxious fluids and fumes from materials handling equipment for cleansing and accident prevention
 [NASA-CASE-XMS-01905] c12 N71-21089
 Zero gravity apparatus utilizing pneumatic decelerating means to create payload subjected to zero gravity conditions by dropping its height
 [NASA-CASE-XMP-06515] c14 N71-23227
 Pneumatic servoamplifier for controlling flow regulation
 [NASA-CASE-MSC-12121-1] c15 N71-27147
 Inflatable stabilizing system for use on life raft to reduce rocking and preclude capsizing
 [NASA-CASE-MSC-12393-1] c02 N73-26006
 Airlock
 [NASA-CASE-MFS-20922-1] c18 N74-22136
 Pneumatic load compensating or controlling system
 [NASA-CASE-ABC-10907-1] c37 N75-32465
 Improved tire/wheel concept --- pneumatic aircraft tire
 [NASA-CASE-LAR-11695-2] c37 N80-18402
 System for moving a probe to follow movements of tissue
 [NASA-CASE-NPO-15197-1] c52 N81-26697
POINT SOURCES
 Electronic background suppression field scanning sensor for detecting point source targets
 [NASA-CASE-XGS-05211] c07 N69-39980
 X ray collimating structure for focusing radiation directly onto detector
 [NASA-CASE-XHQ-04106] c14 N70-40240
 Apparatus and method for determining the position of a radiant energy source
 [NASA-CASE-GSC-12147-1] c32 N81-27341
POINTING CONTROL SYSTEMS
 Development of reflector system for application to line-of-sight pointing and tracking telescopes
 [NASA-CASE-NPO-10468] c23 N71-33229
 All sky pointing attitude control system
 [NASA-CASE-ABC-10716-1] c35 N77-20399
 Magnetic suspension and pointing system
 [NASA-CASE-LAR-11889-2] c37 N78-27424
 Magnetic suspension and pointing system --- on a carrier vehicle
 [NASA-CASE-LAR-11889-1] c35 N79-26372
 Solar tracking system
 [NASA-CASE-MFS-23999-1] c44 N81-24520
POLAR ORBITS
 Spin phase synchronization of cartwheel satellite in polar orbit
 [NASA-CASE-XGS-05579] c31 N71-15676
POLARIMETERS
 Automatic polarimeter capable of measuring transient birefringence changes in electro-optic materials
 [NASA-CASE-XNP-08883] c23 N71-16101
 Two beam interferometer-polarimeter
 [NASA-CASE-NPO-11239] c14 N73-12446
 Forward-scatter polarimeter for determining the gaseous depolarization factor in the presence of polluting polydispersed particles
 [NASA-CASE-NPO-13756-1] c35 N76-14434
POLARITY
 Converting output of positive dc voltage source to negative dc voltage across load with common reference point
 [NASA-CASE-XMP-08217] c03 N71-23239
 Peak polarity selector for monitoring waveforms
 [NASA-CASE-FBC-10010] c10 N71-24862
 Precision full wave rectifier circuit for rectifying incoming electrical signals having positive or negative polarity with only positive output signals

- [NASA-CASE-ARC-10101-1] c09 N71-33109
- POLARIZATION (CHARGE SEPARATION)**
- Charge injection method and apparatus of producing large area electrets [NASA-CASE-MFS-23186-2] c24 N78-25137
- POLARIZATION (WAVES)**
- System for interference signal nulling by polarization adjustment [NASA-CASE-NPO-12140-1] c32 N75-24982
- Paraday rotation measurement method and apparatus --- to receive RF signals from spacecraft which exhibits polarization characteristics due to spin stabilization [NASA-CASE-NPO-14839-1] c35 N80-16313
- Multiprism cclinator [NASA-CASE-GSC-12608-1] c35 N81-12387
- Multifrequency broadband polarized horn antenna [NASA-CASE-NPO-14588-1] c32 N81-25278
- POLARIZED ELECTROMAGNETIC RADIATION**
- Device for improving efficiency of parabolic horn antenna system for linearly polarized signals [NASA-CASE-XNP-00611] c09 N70-35219
- Device for improving efficiency of parabolic reflector horn for linearly or circularly polarized waves [NASA-CASE-XNP-00540] c09 N70-35382
- Antenna feed system for receiving circular polarization and transmitting linear polarization [NASA-CASE-NPO-14362-1] c32 N80-16261
- Coaxial phased array antenna [NASA-CASE-MSC-16800-1] c32 N81-14167
- POLARIZED LIGHT**
- Polarization compensator for optical communications [NASA-CASE-GSC-11782-1] c74 N76-30053
- Visible and infrared polarization ratio spectrophotometer [NASA-CASE-LAR-12285-1] c35 N80-28687
- POLARIZERS**
- Partial polarizer filter [NASA-CASE-GSC-12225-1] c74 N79-14891
- POLISHING**
- Conforming polisher for aspheric surfaces of revolution with inflatable tube [NASA-CASE-XGS-02884] c15 N71-22705
- Method of forming a sharp edge on an optical device [NASA-CASE-GSC-12348-1] c74 N80-24149
- POLLUTION CONTROL**
- System for minimizing internal combustion engine pollution emission [NASA-CASE-NPO-13402-1] c37 N76-18457
- Combustion engine --- for air pollution control [NASA-CASE-NPO-13671-1] c37 N77-31497
- Heat pipes to reduce engine exhaust emissions [NASA-CASE-LEW-12590-1] c25 N81-19245
- Supercritical fuel injection system [NASA-CASE-LEW-12990-1] c07 N81-29129
- POLLUTION MONITORING**
- Fluorescence detector for monitoring atmospheric pollutants [NASA-CASE-NPO-13231-1] c45 N75-27585
- Stack plume visualization system [NASA-CASE-LAR-11675-1] c45 N76-17656
- Indicator providing continuous indication of the presence of a specific pollutant in air [NASA-CASE-NPO-13474-1] c45 N76-21742
- Method for detecting pollutants --- through chemical reactions and heat treatment [NASA-CASE-LAR-11405-1] c45 N76-31714
- Automated syringe sampler --- remote sampling of air and water [NASA-CASE-LAR-12308-1] c35 N81-29407
- POLYAMIDE RESINS**
- Vitro-violet process for producing flame resistant polyamides and products produced thereby --- protective clothing for high oxygen environments [NASA-CASE-MSC-16074-1] c27 N80-26446
- Thermoset-thermoplastic aromatic polyamides [NASA-CASE-LAR-12723-1] c27 N81-15107
- POLYBENZIMIDAZOLE**
- Polymeric foams from cross-linkable poly-n-arylenebenzimidazoles [NASA-CASE-ARC-11008-1] c27 N78-31232
- POLYBUTADIENE**
- Synthesis of polyfluorobutadiene by polymerization of perfluorobutadiene with diisopropyl peroxydicarbonate [NASA-CASE-NPO-10863] c06 N70-11251
- Low pressure perfluorobutadiene polymerization with peroxide catalysts [NASA-CASE-NPO-10447] c06 N70-11252
- Inhibited solid propellant composition containing beryllium hydride [NASA-CASE-NPO-10866-1] c28 N79-14228
- POLYCARBONATES**
- Transparent polycarbonate resin, shell helmet and latch design for high altitude and space flight [NASA-CASE-XHS-04935] c05 N71-11190
- POLYCRYSTALS**
- Fabrication of polycrystalline solar cells on low-cost substrates [NASA-CASE-GSC-12022-1] c44 N76-28635
- Process for utilizing low-cost graphite substrates for polycrystalline solar cells [NASA-CASE-GSC-12022-2] c44 N78-24609
- Method for the preparation of inorganic single crystal and polycrystalline electronic materials [NASA-CASE-XLE-02545-1] c76 N79-21910
- A method for producing a solidified body of silicon --- solar cells [NASA-CASE-NPO-15250-1] c25 N81-16174
- POLYESTERS**
- Carboxyl terminated polyester prepolymers and foams produced from prepolymers and materials [NASA-CASE-NPO-10596] c06 N71-25929
- Apparatus for forming drive belts [NASA-CASE-NPO-13205-1] c31 N74-32917
- POLYETHER RESINS**
- Preparation of stable polyurethane polymer by reacting polymer with diisocyanate [NASA-CASE-MFS-10506] c06 N73-30100
- Preparation of fluorohydroxy ethers by reacting fluoroalkylene oxides with alkali salt of polyfluoroalkylene diol [NASA-CASE-MFS-10507] c06 N73-30101
- Preparation of fluorinated polyethers from 2-hydro-perhaloisopropyl alcohols [NASA-CASE-MFS-11492] c06 N73-30102
- POLYIMIDE RESINS**
- Polyimide adhesives [NASA-CASE-LAR-11397-1] c27 N75-29263
- Polyimide adhesives [NASA-CASE-LAR-12181-1] c27 N78-17205
- Low density bismaleimide-carbon microballoon composites --- aircraft and submarine compartment safety [NASA-CASE-ARC-11040-2] c24 N78-27184
- Mixed diamines for lower melting addition polyimide preparation and utilization [NASA-CASE-LAR-12054-1] c27 N79-33316
- Process for preparing high temperature polyimide film laminates [NASA-CASE-LAR-12742-1] c24 N81-12174
- Composition and method for making polyimide resin-reinforced fabric [NASA-CASE-LEW-12933-1] c27 N81-19296
- Tackifier for addition polyimides containing monoethylphthalate [NASA-CASE-LAR-12642-1] c27 N81-29229
- POLYIMIDES**
- Stable polyimide synthesis from mixtures of monomeric diamines and polycarboxylic acid esters [NASA-CASE-LEW-11325-1] c06 N73-27980
- Polyimide foam for the thermal insulation and fire protection [NASA-CASE-ARC-10464-1] c27 N74-12812
- Reinforced structural plastics [NASA-CASE-LEW-10199-1] c27 N74-23125
- Polyimides of ether-linked aryl tetracarboxylic dianhydrides [NASA-CASE-MFS-22355-1] c23 N76-15268
- Process for preparing thermoplastic aromatic polyimides [NASA-CASE-LAR-11828-1] c27 N78-32261
- Ambient cure polyimide foams --- thermal resistant foams [NASA-CASE-ARC-11170-1] c27 N79-11215
- Catalysts for polyimide foams from aromatic isocyanates and aromatic dianhydrides --- flame retardant foams [NASA-CASE-ARC-11107-1] c25 N80-16116

- Crystalline polyimides --- reinforcing fibers for high temperature composites and adhesives as well as flame retardation
[NASA-CASE-LAR-12099-1] c27 N80-16158
- Electrically conductive palladium containing polyimide films
[NASA-CASE-LAR-12705-1] c33 N80-24549
- Low temperature cross linking polyimides
[NASA-CASE-LEW-12676-1] c27 N80-26447
- Method for preparing addition type polyimide prepregs
[NASA-CASE-LAR-12054-2] c27 N81-14078
- Asymmetric polyimide separation membrane and method
[NASA-CASE-NPO-15431-1] c25 N81-29178
- POLYISOBUTYLENE**
Chemical process for production of polyisobutylene compounds and application as solid rocket propellant binder
[NASA-CASE-NPO-10893] c27 N73-22710
- POLYMER CHEMISTRY**
New trifunctional alcohol derived from trimer acid and novel method of preparation
[NASA-CASE-NPO-10714] c06 N69-31244
- Synthesis of siloxane containing epoxy polymers with low dielectric properties
[NASA-CASE-MFS-13994-1] c06 N71-11240
- Apparatus for determining volatile condensable material present in polymeric products
[NASA-CASE-XMP-05699] c06 N71-24607
- Polyimide adhesives
[NASA-CASE-LAR-11397-1] c27 N75-29263
- Triarization of aromatic nitriles
[NASA-CASE-LEW-12053-1] c27 N78-15276
- Polyimide adhesives
[NASA-CASE-LAR-12181-1] c27 N78-17205
- Infusible silazane polymer and process for producing same --- protective coatings
[NASA-CASE-XMP-02526-1] c27 N79-21190
- Fluorine-containing polyformals
[NASA-CASE-XMP-06900-1] c27 N79-21191
- In situ self cross-linking of polyvinyl alcohol battery separators
[NASA-CASE-LEW-12972-1] c44 N79-25481
- Bifunctional monomers having terminal oxime and cyano or amidine groups
[NASA-CASE-ARC-11253-3] c27 N81-24256
- In-situ cross linking of polyvinyl alcohol --- application to battery separator films
[NASA-CASE-LEW-13135-2] c27 N81-24257
- Polymeric compositions and their method of manufacture --- forming filled polymer systems using cryogenics
[NASA-CASE-NPO-10424-1] c27 N81-24258
- Process for the preparation of polycarbonylphosphazenes --- thermal insulation
[NASA-CASE-ARC-11176-2] c27 N81-27271
- Phosphorus-containing bisimide resins
[NASA-CASE-ARC-11321-1] c27 N81-27272
- POLYMER MATRIX COMPOSITE MATERIALS**
Intumescent-ablator coatings using endothermic fillers
[NASA-CASE-ARC-11043-1] c24 N78-27180
- POLYMERIC FILMS**
Ethylene oxide sterilization and encapsulating process for sterile preservation of instruments and solid propellants
[NASA-CASE-XMP-09763] c14 N71-20461
- Hydraulic apparatus for casting and molding of liquid polymers
[NASA-CASE-XMP-07659] c06 N71-22575
- Thermoelectric radiometer using polymer film as capacitor
[NASA-CASE-ARC-10138-1] c14 N72-24477
- Development and characteristics of system for skin packaging articles using thermoplastic film heating and vacuum operated equipment
[NASA-CASE-MFS-20855] c15 N73-27405
- Covered silicon solar cells and method of manufacture --- with polymeric films
[NASA-CASE-LEW-11065-2] c44 N76-14600
- Preparation of dielectric coating of variable dielectric constant by plasma polymerization
[NASA-CASE-ARC-10892-2] c27 N79-14214
- Reverse osmosis membrane of high urea rejection properties --- water purification
[NASA-CASE-ARC-10980-1] c27 N80-23452
- Electrically conductive palladium containing polyimide films
[NASA-CASE-LAR-12705-1] c33 N80-24549
- Surface finishing
[NASA-CASE-MSC-12631-3] c27 N81-14077
- Texturing polymer surfaces by transfer casting --- cardiovascular prosthesis
[NASA-CASE-LEW-13120-1] c31 N81-16327
- Advanced inorganic separators for alkaline batteries and method of making same --- a polymeric coating applied to a porous flexible substrate
[NASA-CASE-LEW-13171-1] c44 N81-22466
- Cross-linked polyvinyl alcohol and method of making same
[NASA-CASE-LEW-13101-2] c23 N81-29160
- POLYMERIZATION**
Synthesis of polyfluorobutadiene by polymerization of perfluorobutadiene with diisopropyl peroxydicarbonate
[NASA-CASE-NPO-10863] c06 N70-11251
- Low pressure perfluorobutadiene polymerization with peroxide catalysts
[NASA-CASE-NPO-10447] c06 N70-11252
- Process for interfacial polymerization of pyromellitic dianhydride and tetraamino benzene
[NASA-CASE-XLA-03104] c06 N71-11235
- Synthesis and chemical properties of imidazopyrrolone/imide copolymers
[NASA-CASE-XLA-08802] c06 N71-11238
- Direct synthesis of polymeric schiff bases from two amines and two aldehydes
[NASA-CASE-XMP-08655] c06 N71-11239
- Synthesis of azine polymers for heat shields by azine-aromatic aldehyde reaction
[NASA-CASE-XMP-08656] c06 N71-11242
- Synthesis of schiff bases for heat shields by acetal amine reactions
[NASA-CASE-XMP-08652] c06 N71-11243
- Preparation of elastomeric diamine silazane polymers
[NASA-CASE-XMP-04133] c06 N71-20717
- Reaction of polyperfluoropolyenes with fluorine to produce saturated polymer chain or create reactive sites on chain
[NASA-CASE-NFO-10862] c06 N72-22107
- Silphenylenesiloxane polymer with in-chain perfluoroalkyl groups
[NASA-CASE-MFS-20979] c06 N72-25151
- Polymerization of perfluorobutadiene
[NASA-CASE-NFO-10863-2] c06 N72-25152
- Preparation of fluorohydroxy ethers by reacting fluoroalkylene oxides with alkali salt of polyfluoroalkylene diol
[NASA-CASE-MFS-10507] c06 N73-30101
- Preparation of fluorinated polyethers from 2-hydro-perhaloisopropyl alcohols
[NASA-CASE-MFS-11492] c06 N73-30102
- Method of preparing water purification membranes --- polymerization of allyl amine as thin films in plasma discharge
[NASA-CASE-ARC-10643-1] c25 N75-12087
- Utilization of oxygen difluoride for syntheses of fluoropolymers
[NASA-CASE-NPO-12061-1] c27 N76-16228
- Nuclear alkylated pyridine aldehyde polymers and conductive compositions thereof
[NASA-CASE-NPO-10557] c27 N78-17214
- Polymeric foams from cross-linkable poly-n-arylenebenzimidazoles
[NASA-CASE-ARC-11008-1] c27 N78-31232
- Ambient cure polyimide foams --- thermal resistant foams
[NASA-CASE-ARC-11170-1] c27 N79-11215
- Preparation of heterocyclic block copolymer omega-diamidoximes
[NASA-CASE-ARC-11060-1] c27 N79-22300
- Catalytic trimerization of aromatic nitriles and triaryl-s-triazine ring cross-linked high temperature resistant polymers and copolymers made thereby
[NASA-CASE-LEW-12053-2] c27 N79-28307
- An improved synthesis of 2, 4, 8, 10-tetroxaspiro (5.5)undecane
[NASA-CASE-ARC-11243-1] c27 N79-30375
- Improved synthesis of polyformals
[NASA-CASE-ARC-11244-1] c27 N79-30376
- Mixed diamines for lower melting addition polyimide preparation and utilization

- [NASA-CASE-LAR-12054-1] c27 N79-33316
Compound oxidized styrylphosphine --- flame
resistant vinyl polymers
[NASA-CASE-MSC-14903-2] c27 N80-10358
Carboranylcyctriphosphazenes and their polymers
--- thermal insulation
[NASA-CASE-ARC-11176-1] c27 N80-21533
Heat resistant polymers of oxidized
styrylphosphine
[NASA-CASE-MSC-14903-3] c27 N80-24438
Perfluoroalkyl polytriazines containing pendent
iododifluoromethyl groups
[NASA-CASE-ARC-11241-1] c25 N81-14016
Viscoelastic cationic polymers containing the
urethane linkage
[NASA-CASE-NPO-10830-1] c27 N81-15104
Process for the preparation of fluorine
containing crosslinked elastomeric
polytriazine and product so produced
[NASA-CASE-ARC-11248-1] c27 N81-17259
The 1,2,4-oxadiazole elastomers --- heat
resistant polymers
[NASA-CASE-ARC-11253-1] c27 N81-17262
Process for preparation of large-particle-size
monodisperse latexes
[NASA-CASE-MPS-25000-1] c25 N81-19242
Ion-exchange hollow fibers
[NASA-CASE-NPO-13309-1] c25 N81-19244
- POLYMERS**
Preparation of ordered poly(arylenesiloxane/
polymers
[NASA-CASE-XMP-10753] c06 N71-11237
Synthesis of aromatic diamines and dialdehyde
polymers using Schiff base
[NASA-CASE-XMP-03074] c06 N71-24740
Automated ball rebound resilience test equipment
for determining viscoelastic properties of
polymers
[NASA-CASE-XLA-08254] c14 N71-26161
Infusible polymer production from reaction of
polyfunctional epoxy resins with
polyfunctional aziridine compounds
[NASA-CASE-NPO-10701] c06 N71-28620
Development of solid state polymer coating for
obtaining thermal balance in spacecraft
components
[NASA-CASE-XLA-01745] c33 N71-28903
Mercaptan terminated polymer containing sulfonic
acid salts of nitrosubstituted aromatic amines
for heat and moisture resistant coatings
[NASA-CASE-ARC-10325] c06 N72-25147
Solid propellant containing hydrazinium
nitroformate oxidizer and polymeric
hydrocarbon binder
[NASA-CASE-NPO-12015] c27 N73-16764
Chemical process for production of
polyisobutylene compounds and application as
solid rocket propellant binder
[NASA-CASE-NPO-10893] c27 N73-22710
Utilization of lithium p-lithiophenoxide to
prepare star polymers
[NASA-CASE-NPO-10998-1] c06 N73-32029
Ultraviolet and thermally stable polymer
compositions
[NASA-CASE-ARC-10592-1] c27 N74-21156
Ultraviolet and thermally stable polymer
compositions
[NASA-CASE-ARC-10592-2] c27 N76-32315
Oil and fat absorbing polymers
[NASA-CASE-NPO-11609-2] c27 N77-31308
Method for separating biological cells ---
suspended in aqueous polymer systems
[NASA-CASE-MPS-23883-1] c51 N80-16715
Chelate-modified polymers for atmospheric gas
chromatography
[NASA-CASE-ARC-11154-1] c25 N80-23383
Modification of the electrical and optical
properties of polymers --- ion irradiation to
create texture
[NASA-CASE-LEW-13027-1] c27 N80-24437
Preparation of perfluorinated imidoylamidoximes
--- for eventual preparation of heat and
chemical resistant polymers
[NASA-CASE-ARC-11267-1] c23 N80-26386
Preparation of perfluorinated 1,2,4-oxadiazoles
--- heat and chemical resistant polymers
[NASA-CASE-ARC-11267-2] c25 N80-26407
- POLYMETHYL METHACRYLATE**
Durable antistatic coating for
polymethylmethacrylate
[NASA-CASE-NPO-13867-1] c27 N78-14164
Process for producing a well-adhered durable
optical coating on an optical plastic substrate
--- abrasion resistant polymethyl methacrylate
lenses
[NASA-CASE-ARC-11039-1] c74 N78-32854
- POLYSACCHARIDES**
Aldehyde-containing urea-absorbing polysaccharides
[NASA-CASE-NPO-13620-1] c27 N77-30236
- POLYTETRAFLUOROETHYLENE**
Procedure for bonding polytetrafluoroethylene
thermal protective sleeves to magnesium alloy
conical shell components with different
thermal coefficients
[NASA-CASE-XLA-01262] c15 N71-21404
- POLYURETHANE FOAM**
Self-erectable space structures of flexible foam
for application in planetary orbits
[NASA-CASE-XLA-00686] c31 N70-34135
Modification of polyurethanes with alkyl halide
resins, inorganic salts, and encapsulated
volatile and reactive halogen for fuel fire
control
[NASA-CASE-ARC-10098-1] c06 N71-24739
Lightweight fire resistant plastic foam for
thermal protection of reentry vehicles and
aircraft structures
[NASA-CASE-ARC-10180-1] c28 N72-20767
Flexible fire retardant polyisocyanate modified
neoprene foam --- for thermal protective devices
[NASA-CASE-ARC-10180-1] c27 N74-12814
Fiber modified polyurethane foam for ballistic
protection
[NASA-CASE-ARC-10714-1] c27 N76-15310
Mixing insert for foam dispensing apparatus
[NASA-CASE-MPS-20607-1] c37 N76-19436
- POLYURETHANE RESINS**
Chemical synthesis of hydroxy terminated
perfluoro ethers as intermediates for highly
fluorinated polyurethane resins
[NASA-CASE-NPO-10768] c06 N71-27254
Formation of polyurethane resins from hydroxy
terminated perfluoro ethers
[NASA-CASE-NPO-10768-2] c06 N72-27144
Fluorinated polyurethanes produced by reacting
hydroxy terminated perfluoro polyether with
diisocyanate
[NASA-CASE-NPO-10767-2] c06 N72-27151
Chemical and physical properties of synthetic
polyurethane polymer prepared by reacting
hydroxy carbonate with organic diisocyanate
[NASA-CASE-MPS-10512] c06 N73-30099
Preparation of stable polyurethane polymer by
reacting polymer with diisocyanate
[NASA-CASE-MPS-10506] c06 N73-30100
Preparation of polyurethane polymer by reacting
hydroxy polyformal with organic diisocyanate
[NASA-CASE-MPS-10509] c06 N73-30103
Chemical and elastic properties of fluorinated
polyurethanes
[NASA-CASE-NPO-10767-1] c06 N73-33076
Flame retardant spandex type polyurethanes
[NASA-CASE-MSC-14331-2] c27 N78-17213
- POLYVINYL ALCOHOL**
In situ self cross-linking of polyvinyl alcohol
battery separators
[NASA-CASE-LEW-12972-1] c44 N79-25481
Method of cross-linking polyvinyl alcohol and
other water soluble resins
[NASA-CASE-LEW-13103-1] c27 N80-32516
In-situ cross linking of polyvinyl alcohol ---
application to battery separator films
[NASA-CASE-LEW-13135-2] c27 N81-24257
Cross-linked polyvinyl alcohol and method of
making same
[NASA-CASE-LEW-13504-1] c27 N81-27279
Polyvinyl alcohol battery separator containing
inert filler --- alkaline batteries
[NASA-CASE-LEW-13556-1] c44 N81-27615
Cross-linked polyvinyl alcohol and method of
making same
[NASA-CASE-LEW-13101-2] c23 N81-29160
Alkaline battery containing a separator of a
cross-linked copolymer of vinyl alcohol and
unsaturated carboxylic acid
[NASA-CASE-LEW-13102-1] c44 N81-29531
- PORCELAIN**
Refractory porcelain enamel passive control

- coating for high temperature alloys
[NASA-CASE-MFS-22324-1] c27 N75-27160
- POROSITY**
Process for making sheets with parallel pores of uniform size
[NASA-CASE-GSC-10984-1] c37 N75-26371
- POROUS MATERIALS**
Production of refractory bodies with controlled porosity by pressing and heating mixtures of refractory and inert metal powders
[NASA-CASE-LEW-10393-1] c17 N71-15468
Multilayer porous refractory metal igniter design with thick, porous, large-grain substrates and thin, porous micron-grain substrates
[NASA-CASE-XNP-04338] c17 N71-23046
Lubrication for bearings by capillary action from oil reservoir of porous material
[NASA-CASE-XNP-03972] c15 N71-23048
Method and photodetector device for locating abnormal voids in low density materials
[NASA-CASE-MFS-20044] c14 N71-28993
Production method for manufacturing porous tungsten bodies from tungsten powder particles
[NASA-CASE-XNP-04339] c17 N71-29137
Compressible electrolyte saturated sponge electrode for biomedical applications
[NASA-CASE-NSC-13648] c05 N72-27103
Porous electrode for use in electrochemical cells
[NASA-CASE-GSC-11368-1] c09 N73-32108
Method of making porous conductive supports for electrodes --- by electroforming and stacking nickel foils
[NASA-CASE-GSC-11367-1] c44 N74-19692
Fluid valve assembly
[NASA-CASE-NSC-12731-1] c37 N78-25426
Heat exchanger and method of making --- bonding rocket chambers with a porous metal matrix
[NASA-CASE-LEW-12441-1] c34 N79-13289
Castable high temperature refractory materials
[NASA-CASE-LEW-13080-1] c27 N80-29496
Densification of porous refractory substrates --- space shuttle orbiter tiles
[NASA-CASE-NSC-18737-1] c25 N81-29180
Method of repairing surface damage to porous refractory substrates --- shuttle orbiter tiles
[NASA-CASE-NSC-18736-1] c27 N81-29231
- POROUS PLATES**
Method for producing porous tungsten plates for ionizing cesium compounds for propulsion of ion engines
[NASA-CASE-XLE-00455] c28 N70-38197
- POREPHYSICS**
Method and apparatus for eliminating luminol interference material
[NASA-CASE-NSC-16260-1] c51 N80-16714
- PORTABLE EQUIPMENT**
Portable electron beam welding chamber
[NASA-CASE-LEW-11531] c15 N71-14932
Portable apparatus producing high velocity annular air column surrounding low velocity, filtered, superclean air central core for industrial clean room environmental control
[NASA-CASE-XMF-03212] c15 N71-22721
Portable cutting machine for piping weld preparation
[NASA-CASE-XKS-07953] c15 N71-26134
Method and apparatus for precision sizing and joining of large diameter tubes by bulging or constricting overlapping ends
[NASA-CASE-XMF-05114-2] c15 N71-26148
Portable cryogenic cooling system design including turbine pump, cooling chamber, and atomizer
[NASA-CASE-NPO-10467] c23 N71-26654
Automatic controlled drive mechanism for portable boring bar
[NASA-CASE-XLA-03661] c15 N71-33518
One hand backpack harness
[NASA-CASE-LAR-10102-1] c05 N72-23085
Portable tester for monitoring bacterial contamination by adenosine triphosphate light reaction
[NASA-CASE-GSC-10879-1] c14 N72-25413
Portable penetrometer for analyzing soil characteristics
[NASA-CASE-MFS-20774] c14 N73-19420
Hand-held, lightweight, portable photomicroscope
[NASA-CASE-ARC-10468-1] c14 N73-33361
- System for enhancing tool-exchange capabilities of a portable wrench
[NASA-CASE-MFS-22283-1] c37 N75-33395
Method of peening and portable peening gun
[NASA-CASE-MFS-23047-1] c37 N76-18454
Portable electrophoresis apparatus using minimum electrolyte
[NASA-CASE-NFO-13274-1] c25 N79-10163
Portable heatable container
[NASA-CASE-NFO-14237-1] c44 N80-20808
Portable device for use in starting air-start-units for aircraft and having cable lead testing capability
[NASA-CASE-FRC-10113-1] c33 N80-26599
Portable appliance security apparatus
[NASA-CASE-GSC-12399-1] c33 N81-25299
Dual-beam skin friction interferometer --- portable equipment
[NASA-CASE-ARC-11354-1] c36 N81-29415
- PORTABLE LIFE SUPPORT SYSTEMS**
Portable breathing system --- a breathing apparatus using a rebreathing system of heat exchangers for carbon dioxide removal
[NASA-CASE-NSC-16182-1] c54 N80-10799
- PORTS (OPENINGS)**
Sealing evacuation port and evacuating vacuum container such as space jackets
[NASA-CASE-XMF-03290] c15 N71-23256
Safety shield for vacuum/pressure chamber viewing port
[NASA-CASE-GSC-12513-1] c31 N81-19343
- POSITION (LOCATION)**
Position locating system for remote aircraft using voice communication and digital signals
[NASA-CASE-GSC-10087-2] c21 N71-13958
Development of telemetry system for position location and data acquisition
[NASA-CASE-GSC-10083-1] c30 N71-16090
Automatic braking device for rapidly transferring humans or materials from elevated location
[NASA-CASE-XKS-07814] c15 N71-27067
System and method for position locating for air traffic control involving supersonic transports
[NASA-CASE-GSC-10087-3] c07 N72-12080
Location identification system with ground based transmitter and aircraft borne receiver/decoder
[NASA-CASE-BRC-10324] c07 N72-25173
System for detecting impact position of cosmic dust on detector surface
[NASA-CASE-GSC-11291-1] c25 N72-33696
Collimator for analyzing spatial location of near and distant sources of radiation
[NASA-CASE-MFS-20546-2] c14 N73-30389
Measuring probe position recorder
[NASA-CASE-LAR-10806-1] c35 N74-32877
Vehicle locating system utilizing AM broadcasting station carriers
[NASA-CASE-NFO-13217-1] c32 N75-26194
Impact position detector for outer space particles
[NASA-CASE-GSC-11829-1] c35 N75-27331
Aircraft-mounted crash-activated transmitter device
[NASA-CASE-MFS-16609-3] c03 N76-32140
Twin-capacitive shaft angle encoder with analog output signal
[NASA-CASE-ARC-10897-1] c33 N77-31404
X-ray position detector
[NASA-CASE-NFO-12087-1] c74 N81-19898
Navigation system and method
[NASA-CASE-GSC-12508-1] c04 N81-26085
- POSITION INDICATORS**
Rocket-borne aspect sensor consisting of radiation sensor, apertured disk, commutator, and counting circuits
[NASA-CASE-XGS-08266] c14 N69-27432
Characteristics and performance of electrical system to determine angular rotation
[NASA-CASE-XMF-00447] c14 N70-33179
Magnetic element position sensing device, using misaligned electromagnets
[NASA-CASE-XGS-07514] c23 N71-16099
Describing angular position and velocity sensing apparatus
[NASA-CASE-XGS-05680] c14 N71-17585
Mosaic semiconductor radiation detector and position indicator systems engineering for low energy particles
[NASA-CASE-XGS-03230] c14 N71-23401

- Doppler compensated communication system for locating supersonic transport position
[NASA-CASE-GSC-10087-4] c07 N73-20174
- Meteoroid impact position locator aid for manned space station
[NASA-CASE-LAR-10629-1] c35 N75-33367
- Position determination systems --- using orbital antenna scan of celestial bodies
[NASA-CASE-MSC-12593-1] c17 N76-21250
- Solar cell angular position transducer
[NASA-CASE-LAR-11999-1] c44 N80-18552
- POSITIONING**
- Centering device with ultrafine adjustment for use with roundness measuring apparatus
[NASA-CASE-XMF-00480] c14 N70-39898
- Portable device for aligning surfaces of two adjacent wall or sheet sections for joining at point of junction
[NASA-CASE-XMF-01452] c15 N70-41371
- Electro-optical/computer system for aligning large structural members and maintaining correct position
[NASA-CASE-XMP-02029] c14 N70-41955
- Manual control mechanism for adjusting control rod to null position
[NASA-CASE-XLA-01808] c15 N71-20740
- Rotating raster generator
[NASA-CASE-FRC-10071-1] c32 N74-20813
- POSITIONING DEVICES (MACHINERY)**
- Swivel support for gas bearing for position adjustment between ball and supporting cup
[NASA-CASE-XMF-07808] c15 N71-23812
- Caterpillar micropositioner for positioning machine tools adjacent to workpiece
[NASA-CASE-GSC-10780-1] c14 N72-16283
- Positioning mechanism for converting translatory motion into rotary motion
[NASA-CASE-NPO-10679] c15 N72-21462
- Design and development of test stand system for supporting test items in vacuum chamber
[NASA-CASE-MPS-21362] c11 N73-20267
- Method and apparatus for optically monitoring the angular position of a rotating mirror
[NASA-CASE-GSC-11353-1] c74 N74-21304
- Automatic focus control for facsimile cameras
[NASA-CASE-LAR-11213-1] c35 N75-15014
- Reference apparatus for medical ultrasonic transducer
[NASA-CASE-ARC-10753-1] c54 N75-27760
- Controlled caging and uncaging mechanism
[NASA-CASE-GSC-11063-1] c37 N77-27400
- POSITIVE FEEDBACK**
- Complementary regenerative transistorized switch circuit employing positive and negative feedback
[NASA-CASE-XGS-02751] c09 N71-23015
- POTABLE WATER**
- Potable water reclamation from human wastes in zero-G environment
[NASA-CASE-XLA-03213] c05 N71-11207
- Utilization of solar radiation by solar still for converting salt and brackish water into potable water
[NASA-CASE-XMS-04533] c15 N71-23086
- Chlorine generator for purifying water in life support systems of manned spacecraft
[NASA-CASE-XLA-08913] c14 N71-28933
- Potable water dispenser
[NASA-CASE-MPS-21115-1] c54 N74-12779
- Metering gun for dispensing precisely measured charges of fluid
[NASA-CASE-MPS-21163-1] c54 N74-17853
- Iodine generator for reclaimed water purification
[NASA-CASE-MSC-14632-1] c54 N78-14784
- POTASSIUM SILICATES**
- Fireproof potassium silicate coating composition, insoluble in water after application
[NASA-CASE-GSC-10072] c18 N71-14014
- POTENTIOMETERS**
- Angle detector
[NASA-CASE-ARC-11036-1] c35 N78-32395
- POTENTIOMETERS (INSTRUMENTS)**
- Two axis flight controller with potentiometer control shafts directly coupled to rotatable ball members
[NASA-CASE-XFR-04104] c03 N70-42073
- Device for controlling rotary potentiometer mounted on aircraft steering wheel or aileron control
- [NASA-CASE-XAC-10019] c15 N71-23809
- Mechanical function generators with potentiometer as sensing element
[NASA-CASE-XAC-00001] c15 N71-28952
- Indirect microbial detection
[NASA-CASE-LAR-12520-1] c51 N81-28698
- POTTING COMPOUNDS**
- Removable potting compound for instrument shock protection
[NASA-CASE-XLA-00482] c15 N70-36409
- Flexible, repairable, portable composition for encapsulating electric connectors
[NASA-CASE-XGS-05180] c18 N71-25881
- Thermally conductive polymer for potting electrical components
[NASA-CASE-GSC-11304-1] c06 N72-21105
- POWDER (PARTICLES)**
- A system for concurrently delivering a stream of powdered fuel and a stream of powdered oxidizer to a combustion chamber for a reaction motor
[NASA-CASE-MPS-23904-1] c20 N79-13077
- A method for producing a solidified body of silicon --- solar cells
[NASA-CASE-NPO-15250-1] c25 N81-16174
- POWDER METALLURGY**
- Freeze casting of metal ceramic and refractory compound powders into plastic slips
[NASA-CASE-XLE-00106] c15 N71-16076
- Production method for manufacturing porous tungsten bodies from tungsten powder particles
[NASA-CASE-XNP-04339] c17 N71-29137
- Dry electrode manufacture, using silver powder with cement
[NASA-CASE-FRC-10029-2] c05 N72-25121
- Grinding mixtures of powdered metals and inert fillers for conversion to halide
[NASA-CASE-LEW-10450-1] c15 N72-25448
- Superalloys from prealloyed powders at high temperatures
[NASA-CASE-LEW-10805-1] c15 N73-13465
- Method of heat treating a formed powder product material
[NASA-CASE-LEW-10805-3] c26 N74-10521
- Method of forming articles of manufacture from superalloy powders
[NASA-CASE-LEW-10805-2] c37 N74-13179
- Cermet composition and method of fabrication --- heat resistant alloys and powders
[NASA-CASE-NPO-13120-1] c27 N76-15311
- POWER AMPLIFIERS**
- Characteristics of high power, low distortion, alternating current power amplifier
[NASA-CASE-LAR-10218-1] c09 N70-34559
- Power supply with automatic power factor conversion system
[NASA-CASE-XMS-02159] c10 N71-22961
- Solid state broadband stable power amplifier
[NASA-CASE-XNP-10854] c10 N71-26331
- High efficiency transformerless amplitude modulator coupled to RF power amplifier
[NASA-CASE-GSC-10668-1] c07 N71-28430
- Isolated output system for a class D switching-mode amplifier
[NASA-CASE-MPS-21616-1] c33 N75-30429
- POWER CONDITIONING**
- Module failure isolation circuit for paralleled inverters --- preventing system failure during power conditioning for spacecraft applications
[NASA-CASE-NPO-14000-1] c33 N79-24254
- Self-reconfiguring solar cell system
[NASA-CASE-LEW-12586-1] c44 N80-14472
- Microwave switching power divider --- for use in Earth orbiting satellites having spherical multi-element antenna arrays
[NASA-CASE-GSC-12420-1] c33 N80-21670
- Unequal split microwave power divider
[NASA-CASE-LAR-12889-1] c33 N81-31483
- POWER CONVERTERS**
- A gas-to-hydraulic power converter
[NASA-CASE-MSC-18794-1] c37 N81-24445
- POWER EFFICIENCY**
- Low power drain transistor feedback circuit
[NASA-CASE-XGS-04999] c09 N69-24317
- Excitation and detection circuitry for flux responsive magnetic head
[NASA-CASE-XNP-04183] c09 N69-24329
- Increasing available power per unit area in ion rocket engine by increasing beam density

- [NASA-CASE-XLE-00519] c28 N70-41576
Absorbing gas reactivity control system for
minimizing power distribution and perturbation
in nuclear reactors
[NASA-CASE-XLE-04599] c22 N72-20597
Remote platform power conserving system
[NASA-CASE-GSC-11182-1] c15 N75-13007
A gas-to-hydraulic power converter
[NASA-CASE-MSC-18794-1] c37 N81-24445
- POWER GAIN**
Serrrodyne traveling wave tube reentrant
amplifier for synchronous communication
satellites operating at microwave frequencies
[NASA-CASE-XGS-01022] c07 N71-16088
Switching circuit for control of cathode ray
tube beam with fast rise time for output signal
[NASA-CASE-KSC-10647-1] c10 N72-31273
- POWER LIMITERS**
Monostable multivibrator for conserving power in
spacecraft systems
[NASA-CASE-GSC-10082-1] c10 N72-20221
- POWER LINES**
Patent data on terminal insert connector for
flat electric cables
[NASA-CASE-IXF-00324] c09 N70-34596
Motor run-up system --- power lines
[NASA-CASE-NPO-13374-1] c33 N75-19524
Apparatus including a plurality of spaced
transformers for locating short circuits in
cables
[NASA-CASE-KSC-10899-1] c33 N79-18193
Shielded conductor cable system
[NASA-CASE-MSC-12745-1] c33 N81-27397
- POWER SERIES**
Describing circuit for obtaining sum of squares
of numbers
[NASA-CASE-XGS-04765] c08 N71-18693
Phase modulating with odd and even finite power
series of a modulating signal
[NASA-CASE-LAB-11607-1] c32 N77-14292
- POWER SPECTRA**
Method and apparatus for high resolution power
spectrum analysis
[NASA-CASE-NPO-10748] c08 N72-20177
An instrument for determining coincidence and
elapse time between independent sources of
random sequential events
[NASA-CASE-LAB-12531-1] c35 N81-31529
- POWER SUPPLIES**
Tape recorder designed for low power consumption
and resistance to operational failure under
high stress conditions
[NASA-CASE-XGS-08259] c14 N71-23698
Current dependent variable inductance for input
filter chokes of ac or dc power supplies
[NASA-CASE-ERC-10139] c09 N72-17154
Performance of ac power supply developed for CO2
laser system
[NASA-CASE-GSC-11222-1] c16 N73-32391
High voltage distributor
[NASA-CASE-GSC-11849-1] c33 N76-16332
- POWER SUPPLY CIRCUITS**
Regulated dc to dc converter
[NASA-CASE-XGS-03429] c03 N69-21330
Power control switching circuit using low
voltage semiconductor controlled rectifiers
for high voltage isolation
[NASA-CASE-IXF-02713] c10 N69-39888
Increasing power conversion efficiency of
electronic amplifiers by power supply switching
[NASA-CASE-XMS-00945] c09 N71-10798
Electric power system utilizing thermionic
plasma diodes in parallel and heat pipes as
cathodes
[NASA-CASE-IXF-05843] c03 N71-11055
Pulsed energy power system for application of
combustible gases to turbine controlling ac
voltage generator
[NASA-CASE-MSC-13112] c03 N71-11057
Data processor having multiple sections
activated at different times by selective
power coupling to sections
[NASA-CASE-XGS-04767] c08 N71-12494
Microwave power receiving antenna solving heat
dissipation problems by construction of
elements as heat pipe devices
[NASA-CASE-MFS-20333] c09 N71-13486
Design, development, and operating principles of
power supply with starting circuit which is
independent of voltage regulator
[NASA-CASE-XMS-01991] c09 N71-21449
Power supply with automatic power factor
conversion system
[NASA-CASE-XMS-02159] c10 N71-22961
Electric circuit for reversing direction of
current flow
[NASA-CASE-IXF-00952] c10 N71-23271
Power supply with overload protection for series
stage transistor
[NASA-CASE-XMS-00913] c10 N71-23543
Automatic power supply circuit design for
driving inductive loads and minimizing power
consumption including solenoid example
[NASA-CASE-NFO-10716] c09 N71-24892
Unsaturating magnetic core transformer design
with warning signal for electrical power
processing equipment
[NASA-CASE-ERC-10125] c09 N71-24893
Device for monitoring voltage by generating
signal when voltages drop below predetermined
value
[NASA-CASE-KSC-10020] c10 N71-27338
Power point tracker for maintaining optimal
output voltage of power source
[NASA-CASE-GSC-10376-1] c14 N71-27407
Microwave power divider for providing variable
output power to output waveguide in fixed
waveguide system
[NASA-CASE-NFO-11031] c07 N71-33606
Circuit for monitoring power supply by ripple
current indication
[NASA-CASE-KSC-10162] c09 N72-11225
Dc to ac to dc converter with transistor driven
synchronous rectifiers
[NASA-CASE-GSC-11126-1] c09 N72-25253
LC-oscillator with automatic stabilized
amplitude via bias current control --- power
supply circuit for transducers
[NASA-CASE-MFS-21698-1] c33 N74-26732
Integrable power gyrator --- with Z-matrix
design using parallel transistors
[NASA-CASE-MFS-22342-1] c33 N75-30428
The dc-to-dc converters employing
staggered-phase power switches with two-loop
control
[NASA-CASE-NFO-13512-1] c33 N77-10428
Control for nuclear thermionic power source
[NASA-CASE-NPO-13114-2] c73 N78-28913
Closed loop solar array-ion thruster system with
power control circuitry
[NASA-CASE-LEW-12780-1] c20 N79-20179
Three phase power factor controller
[NASA-CASE-MFS-25535-1] c33 N81-12330
Power factor control system for ac induction
motors
[NASA-CASE-MFS-23988-1] c33 N81-27395
- PRECESSION**
Dynamic precession damping of spin-stabilized
vehicles by using rate gyroscope and angular
accelerometer
[NASA-CASE-XLA-01989] c21 N70-34295
- PRECIPITATION (CHEMISTRY)**
Production of pure metals
[NASA-CASE-LEW-10906-1] c25 N74-30502
- PRECISION**
Precision stepping drive device using cam disk
[NASA-CASE-MFS-14772] c15 N71-17692
Method and apparatus for precision sizing and
joining of large diameter tubes by bulging or
constricting overlapping ends
[NASA-CASE-IXF-05114-2] c15 N71-26148
Method and apparatus for precision control of
radiometer
[NASA-CASE-NFO-15398-1] c35 N81-33449
- PREFLIGHT OPERATIONS**
Automatic balancing device for use on
frictionless supported attitude-controlled
test platforms
[NASA-CASE-LAB-10774] c10 N71-13545
- PRELAUNCH TESTS**
Low loss parasitic probe antenna for prelaunch
tests of spacecraft antennas
[NASA-CASE-IXS-09348] c09 N71-13521
Digital computer system for automatic prelaunch
checkout of spacecraft
[NASA-CASE-IXS-08012-2] c31 N71-15566
- PREPOLYMERS**
Carboxyl terminated polyester prepolymers and

- foams produced from prepolymers and materials
[NASA-CASE-NPO-10596] c06 N71-25929
- Low temperature cross linking polyimides
[NASA-CASE-LEW-12876-1] c27 N80-26447
- Curable liquid hydrocarbon prepolymers
containing hydroxyl groups and process for
producing same
[NASA-CASE-NPO-13137-1] c27 N80-32514
- Prepolymer dianhydrides
[NASA-CASE-NPO-13899-1] c27 N80-32515
- Structural wood panels with improved fire
resistance
[NASA-CASE-ARC-11174-1] c24 N81-13999
- PREPREGS**
- Tackifier for addition polyimides containing
monoethylphthalate
[NASA-CASE-LAR-12642-1] c27 N81-29229
- PRESSURE**
- Strain gage mounting assembly
[NASA-CASE-NPO-13170-1] c35 N76-14430
- Surface conforming thermal/pressure seal --- for
control devices in space vehicles
[NASA-CASE-MSC-18422-1] c37 N80-14400
- PRESSURE CHAMBERS**
- Triggering system for electric arc driven
impulse wind tunnel
[NASA-CASE-XMP-00411] c11 N70-36913
- Whole body measurement systems --- for
weightlessness simulation
[NASA-CASE-MSC-13972-1] c52 N74-10975
- Accumulator
[NASA-CASE-MFS-15267-1] c34 N77-30399
- Safety shield for vacuum/pressure chamber
viewing port
[NASA-CASE-GSC-12513-1] c31 N81-19343
- PRESSURE DISTRIBUTION**
- Piston device for producing known constant
positive pressure within lungs by using
thoracic muscles
[NASA-CASE-XMS-01615] c05 N70-41329
- Preventing pressure buildup in electrochemical
cells by reacting palladium oxide with evolved
hydrogen
[NASA-CASE-XGS-01419] c03 N70-41864
- Accumulator
[NASA-CASE-MFS-19287-1] c34 N77-30399
- Continuous self-locking spiral wound seal ---
for maintaining pressure between chambers in
cryogenic wind tunnels
[NASA-CASE-LAR-12315-1] c37 N80-16339
- Thermal barrier pressure seal --- shielding
junctions between spacecraft control surfaces
and structures
[NASA-CASE-MSC-18134-1] c37 N81-15363
- PRESSURE DROP**
- Leak detector
[NASA-CASE-MFS-21761-1] c35 N75-15931
- PRESSURE EFFECTS**
- System for stabilizing cable phase delay
utilizing a coaxial cable under pressure
[NASA-CASE-NPO-13138-1] c33 N74-17927
- Evacuated, displacement compression mold --- of
tubular bodies from thermosetting plastics
[NASA-CASE-LAR-10782-2] c31 N75-13111
- Internally supported flexible duct joint ---
device for conducting fluids in high pressure
systems
[NASA-CASE-MFS-19193-1] c37 N75-19686
- Fluid pressure balanced seal
[NASA-CASE-XGS-01286-1] c37 N79-33469
- PRESSURE GAGES**
- Differential pressure cell insensitive to
changes in ambient temperature and extreme
overload
[NASA-CASE-XAC-00042] c14 N70-34816
- Blood pressure measuring system for separately
recording dc and ac pressure signals of
Korotkoff sounds
[NASA-CASE-XMS-06061] c05 N71-23317
- Control system for pressure balance device used
in calibrating pressure gages
[NASA-CASE-XMP-04134] c14 N71-23755
- Improved McLeod gage for pressure measurement
[NASA-CASE-XAC-04458] c14 N71-24232
- Ultrahigh vacuum gauge with two collector
electrodes
[NASA-CASE-LAR-02743] c14 N73-32324
- Gas ion laser construction for electrically
isolating the pressure gauge thereof
- [NASA-CASE-MFS-22597] c36 N78-17366
- PRESSURE GRADIENTS**
- Positive displacement flowmeter for measuring
extremely low flows of fluid with self
calibrating features
[NASA-CASE-XMP-02822] c14 N70-41994
- Dual laser optical system and method for
studying fluid flow
[NASA-CASE-MFS-25315-1] c36 N81-19440
- PRESSURE HEADS**
- Head for high speed spinner having a vacuum chuck
--- holding silicon dioxide chips for etching
[NASA-CASE-NPO-15227-1] c37 N81-33482
- PRESSURE MEASUREMENTS**
- Design and development of inertia diaphragm
pressure transducer
[NASA-CASE-XAC-02981] c14 N71-21072
- Design and development of pressure sensor for
measuring differential pressures of few pounds
per square inch
[NASA-CASE-XMP-01974] c14 N71-22752
- Improved McLeod gage for pressure measurement
[NASA-CASE-XAC-04458] c14 N71-24232
- Coherent light beam device and method for
measuring gas density in vacuum chambers
[NASA-CASE-XER-11203] c14 N71-28994
- Design, development, and characteristics of
pressure and temperature sensor operating
immersed in fluid flow
[NASA-CASE-LEW-10281-1] c14 N72-17327
- Calibration of vacuum gauges for measuring total
and partial pressures in ultrahigh vacuum region
[NASA-CASE-XGS-07752] c14 N73-30390
- Absolute pressure measuring device for measuring
gas density level in high vacuum range
[NASA-CASE-LAR-10000] c14 N73-30394
- Wind tunnel model and method
[NASA-CASE-LAR-10812-1] c09 N74-17955
- Indicated mean-effective pressure instrument
[NASA-CASE-LEW-12661-1] c35 N79-14345
- High-temperature microphone system --- for
measuring pressure fluctuations in gases at
high temperature
[NASA-CASE-LAR-12375-1] c32 N79-24203
- Static pressure orifice system testing method
and apparatus
[NASA-CASE-LAR-12269-1] c35 N80-18358
- Detection of the transitional layer between
laminar and turbulent flow areas on a wing
surface --- using an accelerometer to measure
pressure levels during wind tunnel tests
[NASA-CASE-LAR-12261-1] c02 N80-20224
- A self-correcting electronically scanned
pressure sensor
[NASA-CASE-LAR-12686-1] c09 N81-27121
- Non-invasive method and apparatus for measuring
pressure within a pliable vessel
[NASA-CASE-ARC-11264-1] c52 N81-33804
- PRESSURE REDUCTION**
- Relief valve to permit slow and fast bleeding
rates at difference pressure levels
[NASA-CASE-XMS-05894-1] c15 N69-21924
- Sealed electric storage battery with gas
manifold interconnecting each cell
[NASA-CASE-XMP-03378] c03 N71-11051
- Depressurization of arc lamps
[NASA-CASE-NPO-10790-1] c33 N77-21316
- Method of purifying metallurgical grade silicon
employing reduced pressure atmospheric control
[NASA-CASE-NPO-14474-1] c26 N80-14229
- Pressure letdown method and device for coal
conversion systems
[NASA-CASE-NPO-15100-1] c28 N81-33306
- PRESSURE REGULATORS**
- Pressure regulating system with high pressure
fluid source, adapted to maintain constant
downstream pressure
[NASA-CASE-XMP-00450] c15 N70-38603
- Pulmonary resuscitation method and apparatus
with adjustable pressure regulator
[NASA-CASE-XMS-01115] c05 N70-39922
- Structural design of high pressure regulator valve
[NASA-CASE-XMP-00710] c15 N71-10778
- Space suit with pressure-volume compensator system
[NASA-CASE-XLA-05332] c05 N71-11194
- Portable environmental control and life support
system for astronaut in and out of spacecraft
[NASA-CASE-XMS-09632-1] c05 N71-11203

- Antibacklash circuit for hydraulic drive system
[NASA-CASE-XNP-01020] c03 N71-12260
- High impact pressure regulator having minimum
number of lightweight movable elements
[NASA-CASE-NPO-10175] c14 N71-18625
- Pressure regulator for space suit worn
underwater to simulate space environment for
testing and experimentation
[NASA-CASE-MPS-20332] c05 N72-20697
- Underwater space suit pressure control regulator
[NASA-CASE-MPS-20332-2] c05 N73-25125
- Combined pressure regulator and shutoff valve
[NASA-CASE-NPO-13201-1] c37 N75-15050
- Pressure modulating valve
[NASA-CASE-MSC-14905-1] c37 N77-28487
- Flow compensating pressure regulator
[NASA-CASE-LRW-12718-1] c34 N78-25351
- Flow diverter valve and flow diversion method
[NASA-CASE-HQN-00573-1] c37 N79-33468
- Intra-ocular pressure normalization technique
and equipment
[NASA-CASE-LRW-12955-1] c52 N80-14684
- Intra-ocular pressure normalization technique
and equipment
[NASA-CASE-LRW-12723-1] c52 N80-18690
- Pressure control valve --- inflating flexible
bladders
[NASA-CASE-ARC-11251-1] c37 N81-17433
- Prosthetic urinary sphincter
[NASA-CASE-MPS-23717-1] c52 N81-25660
- Ion beam sputter-etched ventricular catheter for
hydrocephalus shunt
[NASA-CASE-LRW-13107-1] c52 N81-27786
- PRESSURE SENSORS**
- Fabrication of pressure-telemetry transducers
[NASA-CASE-XNP-09752] c14 N69-21541
- Pressure probe for sensing ambient static air
pressures
[NASA-CASE-XLA-00481] c14 N70-36824
- Ambient atmospheric pressure sensing device for
determining altitude of flight vehicles
[NASA-CASE-XLA-00128] c15 N70-37925
- Dynamic sensor for gas pressure or density
measurement
[NASA-CASE-XAC-02877] c14 N70-41681
- Design and development of inertia diaphragm
pressure transducer
[NASA-CASE-XAC-02981] c14 N71-21072
- Design and development of pressure sensor for
measuring differential pressures of few pounds
per square inch
[NASA-CASE-XMP-01974] c14 N71-22752
- Combination pressure transducer-calibrator
assembly for measuring fluid
[NASA-CASE-XNP-01660] c14 N71-23036
- Pressure sensor network for measuring liquid
dynamic response in flight including fuel tank
acceleration, liquid slosh amplitude, and fuel
depth monitoring
[NASA-CASE-XLA-05541] c12 N71-26387
- Miniature electromechanical junction transducer
operating on piezoelectric effect and
utilizing epoxy for stress coupling component
[NASA-CASE-ERC-10087] c14 N71-27334
- Method for making pressurized meteoroid
penetration detector panels
[NASA-CASE-XLA-08916] c15 N71-29018
- Design, development, and characteristics of
pressure and temperature sensor operating
immersed in fluid flow
[NASA-CASE-LRW-10281-1] c14 N72-17327
- Pressure transducer for systems for measuring
forces of compression
[NASA-CASE-NPO-10832] c14 N72-21405
- Pressure operated electrical switch responsive
to pressure decrease after pressure increase
[NASA-CASE-LAB-10137-1] c09 N72-22204
- Wide range dynamic pressure sensor with
vibrating diaphragm for measuring density and
pressure of gaseous environment
[NASA-CASE-ARC-10263-1] c14 N72-22438
- Development of differential pressure control
system using motion of mechanical diaphragms
to operate electric switch
[NASA-CASE-MPS-14216] c14 N73-13418
- Pressurized panel meteoroid detector
[NASA-CASE-XLA-08916-2] c14 N73-28487
- System for calibrating pressure transducer
[NASA-CASE-LAB-10910-1] c35 N74-13132
- Stagnation pressure probe --- for measuring
pressure of supersonic gas streams
[NASA-CASE-LAB-11139-1] c35 N74-32878
- Circuit for detecting initial systole and
diastolic notch --- for monitoring arterial
pressure
[NASA-CASE-LRW-11581-1] c54 N75-13531
- Leak detector
[NASA-CASE-MPS-21761-1] c35 N75-15931
- Measurement of gas production of microorganisms
--- using pressure sensors
[NASA-CASE-LAB-11326-1] c35 N75-33368
- Static pressure probe
[NASA-CASE-LAB-11552-1] c35 N76-14429
- Trielectrode capacitive pressure transducer
[NASA-CASE-ARC-10711-2] c33 N76-21390
- Catheter tip force transducer for cardiovascular
research
[NASA-CASE-NPO-13643-1] c52 N76-29896
- Miniature biaxial strain transducer
[NASA-CASE-LAB-11648-1] c35 N77-14407
- Pressure transducer --- using a monomeric charge
transfer complex sensor
[NASA-CASE-NPO-11150] c35 N78-17359
- Electronically scanned pressure sensor module
with in SITU calibration capability
[NASA-CASE-LAB-12230-1] c35 N79-14347
- System for use in conducting wake investigation
for a wing in flight --- differential pressure
measurements for drag investigations
[NASA-CASE-FRC-11024-1] c02 N80-28300
- Tactile sensing system --- manipulator controllers
[NASA-CASE-NPO-15094-1] c33 N81-16386
- A self-correcting electronically scanned
pressure sensor
[NASA-CASE-LAB-12686-1] c09 N81-27121
- Automatic compression adjusting mechanism for
internal combustion engines
[NASA-CASE-MSC-18807-1] c37 N81-29442
- Non-invasive method and apparatus for measuring
pressure within a pliable vessel
[NASA-CASE-ARC-11264-1] c52 N81-33804
- PRESSURE SUITS**
- Helmet and torso tie-down mechanism for
shortening pressure suits upon inflation
[NASA-CASE-XMS-00784] c05 N71-12335
- Design and development of flexible joint for
pressure suits
[NASA-CASE-XMS-09636] c05 N71-12344
- Cord restraint system for pressure suit joints
[NASA-CASE-XMS-09635] c05 N71-24623
- Development of improved convolute section for
pressurized suits to provide high degree of
mobility in response to minimum of applied
torque
[NASA-CASE-XMS-09637-1] c05 N71-24730
- Fabrication of root cord restrained fabric suit
sections from sheets of fabric
[NASA-CASE-MSC-12398] c05 N72-20098
- Restraint torso for increased mobility and
reduced physiological effects while wearing
pressurized suits
[NASA-CASE-MSC-12397-1] c05 N72-25119
- Flexible joint for pressurizable garment
[NASA-CASE-MSC-11072] c54 N74-32546
- Walking boot assembly
[NASA-CASE-ARC-11101-1] c54 N78-17675
- Pressure suit joint analyzer
[NASA-CASE-ARC-11314-1] c54 N80-30043
- PRESSURE SWITCHES**
- Reinforcing beam system for highly flexible
diaphragms in valves or pressure switches
[NASA-CASE-XNP-01962] c32 N70-41370
- Calibrating pressure switch
[NASA-CASE-XMP-04494-1] c33 N79-33392
- PRESSURE VESSELS**
- Liquid rocket systems for propulsion and control
of spacecraft
[NASA-CASE-XNP-00610] c28 N70-36910
- Thin walled pressure test vessel using
low-melting alloy-filled joint to attach shell
to heads
[NASA-CASE-XLE-04677] c15 N71-10577
- Control of gas flow from pressurized vessel by
thermal expansion of metal plug
[NASA-CASE-NPO-10298] c12 N71-17661
- Method and apparatus for inducing compressive
stresses in pressure vessel to prevent stress
corrosion

[NASA-CASE-XLA-07390] c15 N71-18616
 Heater-mixer for stored fluids
 [NASA-CASE-ABC-10442-1] c35 N74-15093
 Method and apparatus for nondestructive testing
 of pressure vessels
 [NASA-CASE-NPO-12142-1] c38 N76-28563
 Gas compression apparatus
 [NASA-CASE-MSC-14757-1] c35 N78-10428
 Pressure control valve --- inflating flexible
 bladders
 [NASA-CASE-ABC-11251-1] c37 N81-17433
PRESSURE WELDING
 Diffusion welding --- heat treatment of nickel
 alloys following single step vacuum welding
 process
 [NASA-CASE-LEW-11388-2] c37 N74-21055
PRESSURIZING
 Restraining mechanism
 [NASA-CASE-MSC-13054] c54 N78-17677
PRESTRESSING
 Prestressed rocket nozzle with ceramic inner
 rings and refractory metal outer rings
 [NASA-CASE-XNP-02888] c18 N71-21068
 Apparatus for accurately preloading auger
 attachment means for frangible protective
 material
 [NASA-CASE-MSC-18791-1] c37 N81-24446
 Method of manufacture of bonded fiber flywheel
 --- fiberglass-epoxy
 [NASA-CASE-MPS-23674-1] c24 N81-29163
PRETREATMENT
 Anti-wettable materials brazing processes using
 titanium and zirconium for surface pretreatment
 [NASA-CASE-XMS-03537] c15 N69-21471
 Apparatus for accurately preloading auger
 attachment means for frangible protective
 material
 [NASA-CASE-MSC-18791-1] c37 N81-24446
PRIMERS (COATINGS)
 Advanced inorganic separators for alkaline
 batteries and method of making same --- a
 polymeric coating applied to a porous flexible
 substrate
 [NASA-CASE-LEW-13171-1] c44 N81-22466
 Thermal barrier coating system having improved
 adhesion
 [NASA-CASE-LEW-13359-1] c27 N81-24265
PRINTED CIRCUITS
 Electrical feedthrough connection for printed
 circuit boards
 [NASA-CASE-MNP-01483] c14 N69-27431
 Electric connector for printed cable to printed
 cable or to printed board
 [NASA-CASE-XNP-00369] c09 N70-36494
 Electrical connection for printed circuits on
 common board, using bellows principle in rivet
 [NASA-CASE-XNP-05082] c15 N70-41560
 Electrical spot terminal assembly for printed
 circuit boards
 [NASA-CASE-NPO-10034] c15 N71-17685
 Solder coating process for printed copper
 circuit protection
 [NASA-CASE-MNP-01599] c09 N71-20705
 Handling tool for printed circuit cards
 [NASA-CASE-MPS-20453] c15 N71-29133
 Development and characteristics of polyimide
 impregnated laminates with fiberglass cloth
 backing for application as printed circuit
 boards
 [NASA-CASE-MPS-20408] c18 N73-12604
 Techniques for packaging and mounting printed
 circuit boards
 [NASA-CASE-MPS-21919-1] c10 N73-25243
 Device for configuring multiple leads --- method
 for connecting electric leads to printed
 circuit board
 [NASA-CASE-MPS-22133-1] c33 N74-26977
 Connector --- for connecting circuits on
 different layers of multilayer printed circuit
 boards
 [NASA-CASE-LAR-11709-1] c37 N76-27567
 Controlled caging and uncaging mechanism
 [NASA-CASE-GSC-11063-1] c37 N77-27400
 Solar array strip and a method for forming the
 same
 [NASA-CASE-NPO-13652-1] c44 N79-17314
PRINTING
 Application of semiconductor diffusants to solar
 cells by screen printing

[NASA-CASE-LEW-12775-1] c44 N79-11468
PRINTOUTS
 Handling tool for printed circuit cards
 [NASA-CASE-MPS-20453] c15 N71-29133
PRISMS
 Interferometer prism and control system for
 precisely determining direction to remote
 light source
 [NASA-CASE-ABC-10278-1] c14 N73-25463
 Method and apparatus for splitting a beam of
 energy --- optical communication
 [NASA-CASE-GSC-12083-1] c73 N78-32848
 Multiprism collimator
 [NASA-CASE-GSC-12608-1] c35 N81-12387
 Rhomboid prism pair for rotating the plane of
 parallel light beams --- laser velocimeters
 [NASA-CASE-ABC-11311-1] c74 N81-16882
PROBABILITY THEORY
 System and method for character recognition
 [NASA-CASE-NPO-11337-1] c74 N81-19896
PROBES
 Method and apparatus for connecting two
 spacecraft with probe of one inserted in
 rocket engine nozzle of other spacecraft
 [NASA-CASE-MPS-11133] c31 N71-16222
 Development of droplet monitoring probe for use
 in analysis of droplet propagation in
 mixed-phase fluid stream
 [NASA-CASE-NPO-10985] c14 N73-20478
 System for moving a probe to follow movements of
 tissue
 [NASA-CASE-NPO-15197-1] c52 N81-26697
PRODUCT DEVELOPMENT
 Using molds for fabricating individual fluid
 circuit components
 [NASA-CASE-XLA-07829] c15 N72-16329
 Process for developing filament reinforced
 plastic tubes used in research and development
 programs
 [NASA-CASE-LAR-10203-1] c15 N72-16330
 Simplified technique and device for producing
 industrial grade synthetic diamonds
 [NASA-CASE-MPS-20698-2] c15 N73-19457
 High power laser apparatus and system
 [NASA-CASE-XLB-2529-2] c36 N75-27364
 Induced junction solar cell and method of
 fabrication
 [NASA-CASE-NPO-13786-1] c44 N80-29835
 Fiber optic crossbar switch for automatically
 patching optical signals
 [NASA-CASE-KSC-11104-1] c74 N81-12862
 Process for preparation of large-particle-size
 monodisperse latexes
 [NASA-CASE-MPS-25000-1] c25 N81-19242
 Ion-exchange hollow fibers
 [NASA-CASE-NPO-13309-1] c25 N81-19244
 Resin composition, process for producing the
 same, product produced therefrom and process
 for producing said product
 [NASA-CASE-ABC-11331-1] c27 N81-31363
 Phosphorus-containing imide resins
 [NASA-CASE-ABC-11368-1] c27 N81-31364
PRODUCTION ENGINEERING
 Standard coupling design for mass production
 [NASA-CASE-XMS-02532] c15 N70-41808
 Fabrication of curved reflector segments for
 solar mirror
 [NASA-CASE-XLB-08917] c15 N71-15597
 Production of barium fluoride-calcium fluoride
 composite lubricant for bearings or seals
 [NASA-CASE-XLB-08511-2] c18 N71-16105
 Fabrication of sintered impurity semiconductor
 brushes for electrical energy transfer
 [NASA-CASE-MNP-01016] c26 N71-17818
 Technique for making foldable, inflatable,
 plastic honeycomb core panels for use in
 building and bridge structures, light and
 radio wave reflectors, and spacecraft
 [NASA-CASE-XLA-03492] c15 N71-22713
 Multilayer porous refractory metal ionizer
 design with thick, porous, large-grain
 substrates and thin, porous micron-grain
 substrates
 [NASA-CASE-XNP-04338] c17 N71-23046
 Permanently magnetized ion engine casing
 construction for use in spacecraft propulsion
 systems
 [NASA-CASE-XNP-06942] c28 N71-23293

- Dry electrode design with wire sandwiched between two flexible conductive discs for monitoring physiological responses
[NASA-CASE-FBC-10029] c09 N71-24618
- Production method of star tracking reticles for transmitting in visible and near ultraviolet regions
[NASA-CASE-GSC-11188-1] c14 N73-32320
- Process for making sheets with parallel pores of uniform size
[NASA-CASE-GSC-10984-1] c37 N75-26371
- Solar cell collector and method for producing same
[NASA-CASE-LEW-12552-2] c44 N79-11472
- Multilevel metallization method for fabricating a metal oxide semiconductor device
[NASA-CASE-MFS-23541-1] c76 N79-14906
- Solar array strip and a method for forming the same
[NASA-CASE-NPO-13652-1] c44 N79-17314
- Method of fabricating a photovoltaic module of a substantially transparent construction
[NASA-CASE-NPO-14303-1] c44 N80-18550
- Apparatus for sequentially transporting containers
[NASA-CASE-MFS-23846] c37 N80-29704
- Apparatus for use in the production of ribbon-shaped crystals from a silicon melt
[NASA-CASE-NPO-14297-1] c33 N81-19389
- Method and apparatus for producing concentric hollow spheres --- inertial confinement fusion targets
[NASA-CASE-NPO-14596-1] c51 N81-33319
- PROJECTILES**
- Self-obliterating gas-operated launcher for launching projectiles in decontaminated medium
[NASA-CASE-NPO-11013] c11 N72-22247
- Two stage light gas-plasma projectile accelerator
[NASA-CASE-MFS-22287-1] c75 N76-14931
- PROJECTION**
- Projection system for display of parallax and perspective
[NASA-CASE-MFS-23194-1] c35 N78-17357
- PROJECTIVE GEOMETRY**
- Projection system for display of parallax and perspective
[NASA-CASE-MFS-23194-1] c35 N78-17357
- PROJECTORS**
- Optical projector system for establishing optimum arrangement of instrument displays in aircraft, spacecraft, other vehicles, and industrial instrument consoles
[NASA-CASE-XNP-03853] c23 N71-21882
- System and method for obtaining wide screen Schlieren photographs
[NASA-CASE-NPO-14174-1] c74 N79-20856
- PROPAGATION MODES**
- Dual waveguide mode source for controlling amplitudes of two modes
[NASA-CASE-XNP-03134] c07 N71-10676
- PROPELLANT ACTUATED INSTRUMENTS**
- Pressure limiting propellant actuating system
[NASA-CASE-MSC-18179-1] c20 N80-18097
- PROPELLANT ADDITIVES**
- Inhibited solid propellant composition containing beryllium hydride
[NASA-CASE-NPO-10866-1] c28 N79-14228
- PROPELLANT BINDERS**
- Chemical process for production of polyisobutylene compounds and application as solid rocket propellant binder
[NASA-CASE-NPO-10893] c27 N73-22710
- Recovery of aluminum from composite propellants
[NASA-CASE-NPO-14110-1] c28 N81-15119
- PROPELLANT CASTING**
- Casting propellant in rocket engine
[NASA-CASE-LAR-11995-1] c28 N77-10213
- Solid propellant rocket motor and method of making same
[NASA-CASE-XLA-1349] c20 N77-17143
- PROPELLANT CHEMISTRY**
- Nitramine propellants --- gun propellant burning rate
[NASA-CASE-NPO-14103-1] c28 N78-31255
- PROPELLANT COMBUSTION**
- Spherical solid propellant rocket engine having abrupt burnout
[NASA-CASE-IHQ-01897] c28 N70-35381
- Rocket combustion chamber stability by controlling transverse instability during propellant combustion
[NASA-CASE-XLE-04603] c33 N71-21507
- PROPELLANT DECOMPOSITION**
- Unit for generating thrust from catalytic decomposition of hydrogen peroxide, for high altitude aircraft or spacecraft reaction control
[NASA-CASE-XMS-00583] c28 N70-38504
- PROPELLANT GRAINS**
- Grain configuration for solid propellant rocket engines
[NASA-CASE-XGS-03556] c27 N70-35534
- PROPELLANT TANKS**
- Liquid rocket systems for propulsion and control of spacecraft
[NASA-CASE-XNP-00610] c28 N70-36910
- Slosh damping method for liquid rocket propellant tanks
[NASA-CASE-XNP-00658] c12 N70-38997
- Expulsion and measuring device for determining quantity of liquid in tank under conditions of weightlessness
[NASA-CASE-XMS-01546] c14 N70-40233
- Collapsible auxiliary tank for restarting liquid propellant rocket motors under zero gravity
[NASA-CASE-XNP-01390] c28 N70-41275
- Liquid propellant tank design with semitoroidal bulkhead
[NASA-CASE-XNP-01899] c31 N70-41948
- Microleak detector mounted on weld seam of propellant tank of launch vehicle
[NASA-CASE-XNP-02307] c14 N71-10779
- Fabrication of filament wound propellant tank for cryogenic storage
[NASA-CASE-XLE-03803-2] c15 N71-17651
- Slosh and swirl alleviator for liquid propellant tanks during transport and flight
[NASA-CASE-XLA-05749] c15 N71-19569
- Two phase fluid pressurization system for propellant tank
[NASA-CASE-MSC-12390] c27 N71-29155
- Space vehicle system
[NASA-CASE-MSC-12561-1] c18 N76-17185
- Passive propellant system
[NASA-CASE-MFS-23642-2] c20 N78-27176
- PROPELLANT TRANSFER**
- Two component valve assembly for cryogenic liquid transfer regulation
[NASA-CASE-XLE-00397] c15 N70-36492
- Apparatus for cryogenic liquid storage with heat transfer reduction and for liquid transfer at zero gravity conditions
[NASA-CASE-XLE-00345] c15 N70-38020
- Continuous variation of propellant flow and thrust by application of liquid foam flow theory to injection orifice
[NASA-CASE-XLE-00177] c28 N70-40367
- Method and feed system for separating and orienting liquid and vapor phases of liquid propellants in zero gravity environment
[NASA-CASE-XLE-01182] c27 N71-15635
- Electron bombardment ion rocket engine with improved propellant introduction system
[NASA-CASE-XLE-02066] c28 N71-15661
- Rocket combustion chamber stability by controlling transverse instability during propellant combustion
[NASA-CASE-XLE-04603] c33 N71-21507
- Vapor-liquid separator design with vapor driven pump for separated liquid pumping for application in propellant transfer
[NASA-CASE-XNP-04042] c15 N71-23023
- Filler valve design for supplying liquid propellants at high pressure to space vehicles
[NASA-CASE-XNP-01747] c15 N71-23024
- Internal labyrinth and shield structure to improve electrical isolation of propellant feed source from ion thruster
[NASA-CASE-LEW-10210-1] c28 N71-26781
- Flexible bellows joint shielding sleeve for propellant transfer pipelines
[NASA-CASE-XNP-01855] c15 N71-28937
- Passive propellant system
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- A system for concurrently delivering a stream of powdered fuel and a stream of powdered oxidizer to a combustion chamber for a reaction motor
[NASA-CASE-MFS-23904-1] c20 N79-13077
- PROPELLER BLADES**
- Directed fluid stream for propeller blade

PROPORTIONAL CONTROL

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loading control
[NASA-CASE-XAC-00139] c02 N70-34856

PROPORTIONAL CONTROL

Proportional controller for regulating aircraft or spacecraft motion about three axes
[NASA-CASE-XAC-03392] c03 N70-41954

PROPULSION SYSTEM CONFIGURATIONS

Electrothermal rocket engine using resistance heated heat exchanger
[NASA-CASE-XLE-00267] c28 N70-33356

Grain configuration for solid propellant rocket engines
[NASA-CASE-XGS-03556] c27 N70-35534

Shrouded composite propulsion system configuration
[NASA-CASE-XLA-01043] c28 N71-10780

Electrostatic microthrust propulsion system with annular slit colloid thruster
[NASA-CASE-GSC-10709-1] c28 N71-25213

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A system for concurrently delivering a stream of powdered fuel and a stream of powdered oxidizer to a combustion chamber for a reaction motor
[NASA-CASE-MFS-23904-1] c20 N79-13077

Apparatus for endoscopic examination --- analysis of the propulsion system configuration and transmitter
[NASA-CASE-NPO-14092-1] c52 N80-16725

PROPULSION SYSTEM PERFORMANCE

Variable mixer propulsion cycle
[NASA-CASE-LBW-12917-1] c07 N78-18067

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Prosthetic limb with tactile sensing device
[NASA-CASE-MFS-16570-1] c05 N73-32013

Orthotic arm joint --- for use in mechanical arms
[NASA-CASE-MFS-21611-1] c54 N75-12616

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[NASA-CASE-MFS-23225-1] c52 N77-14735

Aldehyde-containing urea-absorbing polysaccharides
[NASA-CASE-NPO-13620-1] c27 N77-30236

Rotational joint assembly for the prosthetic leg
[NASA-CASE-KSC-11004-1] c54 N77-30749

Mechanical energy storage device for hip disarticulation
[NASA-CASE-ARC-10916-1] c52 N78-10686

Method of adhering bone to a rigid substrate using a graphite fiber reinforced bone cement
[NASA-CASE-NPO-13764-1] c27 N76-17215

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[NASA-CASE-KSC-11069-1] c52 N79-26772

Texturing polymer surfaces by transfer casting --- cardiovascular prosthesis
[NASA-CASE-LBW-13120-1] c31 N81-16327

Prosthetic urinary sphincter
[NASA-CASE-MFS-23717-1] c52 N81-25660

PROTECTION

Camera protecting device for use in photographing rocket engine nozzles or other engine components
[NASA-CASE-NPO-10174] c14 N71-18465

Fiber modified polyurethane foam for ballistic protection
[NASA-CASE-ARC-10714-1] c27 N76-15310

PROTECTIVE CLOTHING

Conditioning tanned sharkskin for use as abrasive resistant clothing
[NASA-CASE-XMS-09691-1] c18 N71-15545

One piece human garment for use as contamination proof garment
[NASA-CASE-MSC-12206-1] c05 N71-17599

Thermoregulating with cooling flow pipe network for humans
[NASA-CASE-XMS-10269] c05 N71-24147

Development of improved convolute section for pressurized suits to provide high degree of mobility in response to minimum of applied torque
[NASA-CASE-XMS-09637-1] c05 N71-24730

Voice operated receiving and transmitting system for use in protective suits
[NASA-CASE-KSC-10164] c07 N71-33108

Protective garment ventilation system
[NASA-CASE-XMS-04928] c54 N78-17679

Vitro-violet process for producing flame resistant polyamides and products produced thereby --- protective clothing for high oxygen environments
[NASA-CASE-MSC-16074-1] c27 N80-26446

PROTECTIVE COATINGS

Process permitting application of synthetic resin coating to irregular-shaped objects at ambient temperature
[NASA-CASE-XNP-06508] c18 N69-39895

Ultraviolet radiation resistant alkali-metal silicate coatings for temperature control of spacecraft
[NASA-CASE-XGS-04119] c18 N69-39979

Application techniques for protecting materials during salt bath brazing
[NASA-CASE-XLE-00046] c15 N70-33311

Removable potting compound for instrument shock protection
[NASA-CASE-XLA-00482] c15 N70-36409

Passive thermal control coating on aluminum foil laminate for inflatable spacecraft surfaces
[NASA-CASE-XLA-01291] c33 N70-36617

Using ethylene oxide in preparation of sterilized solid rocket propellants and encapsulating materials
[NASA-CASE-XNP-01749] c27 N70-41897

Fireproof potassium silicate coating composition, insoluble in water after application
[NASA-CASE-GSC-10072] c18 N71-14014

Development of bacteriostatic conformal coating and methods of application
[NASA-CASE-GSC-10007] c18 N71-16046

Vapor deposited laminated nitride-silicon coating for corrosion prevention of carbonaceous surfaces
[NASA-CASE-XLA-00284] c15 N71-16075

Flame or plasma spraying for molybdenum coating of carbon or graphite surfaces to prevent oxidative corrosion
[NASA-CASE-XLA-00302] c15 N71-16077

Development and characteristics of protective coatings for spacecraft
[NASA-CASE-XNP-02507] c31 N71-17679

Development of thermal insulation system for wing and control surfaces of hypersonic aircraft and reentry vehicles
[NASA-CASE-XLA-00892] c33 N71-17897

Bismuth and lead surface coatings for gas bearings in aerospace engineering
[NASA-CASE-XGS-02011] c15 N71-20739

Composition and production method of alkali metal silicate paint with ultraviolet reflection properties
[NASA-CASE-XGS-04799] c18 N71-24183

Method for treating metal surfaces to prevent secondary electron transmission
[NASA-CASE-XNP-09469] c24 N71-25555

Development of solid state polymer coating for obtaining thermal balance in spacecraft components
[NASA-CASE-XLA-01745] c33 N71-28903

Method for coating through-holes in ceramic substrates used in fabricating miniaturized electronic circuits
[NASA-CASE-XMF-05999] c15 N71-29032

Zinc dust formulation for abrasion resistant steel coatings
[NASA-CASE-GSC-10361-1] c18 N72-23581

Development of process for constructing protective covers for solar cells
[NASA-CASE-GSC-11514-1] c03 N72-24037

Resin for protecting p-n semiconductor junction surface
[NASA-CASE-ERC-10339-1] c18 N73-30532

Nonflammable coating compositions --- for use in high oxygen environments
[NASA-CASE-MFS-20486-2] c27 N74-17283

Fused silicide coatings containing discrete particles for protecting niobium alloys --- used in space shuttle thermal protection systems and turbine engine components
[NASA-CASE-LBW-11179-1] c27 N76-16229

High temperature oxidation resistant cermet compositions
[NASA-CASE-NPO-13666-1] c27 N77-13217

Leading edge protection for composite blades
[NASA-CASE-LBW-12550-1] c24 N77-19170

Abrasion resistant coatings for plastic surfaces
[NASA-CASE-ARC-10915-3] c24 N77-24200

Intumescent coatings containing
4,4'-dinitrosulfanilide
[NASA-CASE-ARC-11042-1] c24 N78-14096

Sprayable low density ablator and application
process
[NASA-CASE-MFS-23506-1] c24 N78-24290

Reaction cured glass and glass coatings
[NASA-CASE-ARC-11051-1] c27 N78-32260

Spray coating apparatus having a rotatable
workpiece holder
[NASA-CASE-ARC-11110-1] c37 N78-32434

Infusible silazane polymer and process for
producing same --- protective coatings
[NASA-CASE-XMF-02526-1] c27 N79-21190

Fire protection covering for small diameter
missiles
[NASA-CASE-ARC-11104-1] c15 N79-26100

Improved refractory coatings and method of
producing the same
[NASA-CASE-LBW-13169-1] c26 N80-14232

Heat sealable, flame and abrasion resistant
coated fabric
[NASA-CASE-MSC-18382-1] c27 N80-24440

A silicon-slurry/aluminide coating --- protects
aircraft and land-based gas turbine engines
[NASA-CASE-LBW-13343-1] c24 N80-26389

Curved film cooling admission tube
[NASA-CASE-LBW-13174-1] c34 N81-12363

Improved refractory coatings --- sputtered
coatings on substrates that form stable nitrides
[NASA-CASE-LBW-23169-2] c26 N81-16209

Corrosion resistant thermal barrier coating ---
protecting gas turbines and other engine parts
[NASA-CASE-LBW-13088-1] c26 N81-25188

PROTECTORS
Load cell protection device using spring-loaded
breakaway mechanism
[NASA-CASE-XMS-06782] c32 N71-15974

Payload soft landing system using stowable gas bag
[NASA-CASE-XLA-09881] c31 N71-16085

PROTEINS
Protein sterilization of firefly luciferase
without denaturation
[NASA-CASE-GSC-10225-1] c06 N73-27086

PROTON FLUX DENSITY
Flame detector operable in presence of proton
radiation
[NASA-CASE-MFS-21577-1] c19 N74-29410

PROXIMITY
Focal plane array optical proximity sensor
[NASA-CASE-NPO-15155-1] c74 N81-22694

PSEUDONOISE
System designed to reduce time required for
obtaining synchronization in data
communication with spacecraft utilizing
pseudonoise codes
[NASA-CASE-NPO-10214] c10 N71-26577

Linear shift register with feedback logic for
generating pseudonoise linear recurring binary
sequences
[NASA-CASE-NPO-11406] c08 N73-12175

Multicarrier communications system for
transmitting modulated signals from single
transmitter
[NASA-CASE-NPO-11548] c07 N73-26118

Pseudo-noise test set for communication system
evaluation --- test signals
[NASA-CASE-MFS-22671-1] c35 N75-21582

Pseudonoise code tracking loop
[NASA-CASE-MSC-18035-1] c32 N81-15179

PULLEYS
Apparatus for measuring load on cable under
static or dynamic conditions comprising
pulleys pivoting structure against restraint
of tension strap
[NASA-CASE-XMS-04545] c15 N71-22678

Tensile strength testing device having pulley
guides for exerting multiple forces on test
specimen
[NASA-CASE-XNP-05634] c15 N71-24834

PULMONARY CIRCULATION
Pulmonary resuscitation method and apparatus
with adjustable pressure regulator
[NASA-CASE-XMS-01115] c05 N70-35922

PULMONARY FUNCTIONS
Piston device for producing known constant
positive pressure within lungs by using
thoracic muscles
[NASA-CASE-XMS-01615] c05 N70-41329

PULSE AMPLITUDE

Monitoring system for signal amplitude ranges
over predetermined time interval
[NASA-CASE-XMS-04061-1] c09 N69-39885

Analog to digital converter for converting
pulses to frequencies
[NASA-CASE-XLA-00670] c08 N71-12501

Electrical testing apparatus for detecting
amplitude and width of transient pulse
[NASA-CASE-XMF-06519] c09 N71-12519

Analog to digital converter circuit for pulse
height analysis
[NASA-CASE-XNP-00477] c08 N73-28045

Electro-mechanical sine/cosine generator
[NASA-CASE-LAB-11389-1] c33 N77-26387

Speech analyzer
[NASA-CASE-GSC-11898-1] c32 N77-30309

Power factor control system for ac induction
motors
[NASA-CASE-MFS-23988-1] c33 N81-27395

PULSE AMPLITUDE MODULATION

Voltage controlled oscillators and pulse
amplitude modulation for signal ratio system
[NASA-CASE-XMF-04367] c09 N71-23545

Pulse switching for high energy lasers
[NASA-CASE-NPO-14556-1] c36 N79-21336

PULSE CODE MODULATION

Adaptive compression signal processor for PCM
communication systems
[NASA-CASE-XLA-03076] c07 N71-11266

Bipolar phase detector and corrector for split
phase PCM data signals
[NASA-CASE-XGS-01590] c07 N71-12392

System for recording and reproducing PCM data
from data stored on magnetic tape
[NASA-CASE-XGS-01021] c08 N71-21042

Frequency shift keying apparatus for use with
pulse code modulation data transmission system
[NASA-CASE-XGS-01537] c07 N71-23405

Data reduction and transmission system for TV
PCM data
[NASA-CASE-NPO-11243] c07 N72-20154

Pulse code modulated data from frequency
multiplex communications by digital phase
shift or carrier
[NASA-CASE-NPO-11338] c08 N72-25208

Bit synchronization of PCM communications
signal, without separate synchronization
channel by digital correlation
[NASA-CASE-NPO-11302-1] c07 N73-13149

Method and apparatus for a single channel
digital communications system ---
synchronization of received PCM signal by
digital correlation with reference signal
[NASA-CASE-NPO-11302-2] c32 N74-10132

Multifunction audio digitizer --- producing
direct delta and pulse code modulation
[NASA-CASE-MSC-13855-1] c35 N74-17885

Pulse code modulated signal synchronizer
[NASA-CASE-MSC-12462-1] c32 N74-20809

Pulse code modulated signal synchronizer
[NASA-CASE-MSC-12494-1] c32 N74-20810

Digital transmitter for data bus communications
system
[NASA-CASE-MSC-14558-1] c32 N75-21486

Compact-bi-phase pulse coded modulation decoder
[NASA-CASE-KSC-10834-1] c33 N76-14371

Low distortion receiver for bi-level baseband
PCM waveforms
[NASA-CASE-MSC-14557-1] c32 N76-16249

Differential pulse code modulation
[NASA-CASE-MSC-12506-1] c32 N77-12239

Digital demodulator
[NASA-CASE-LAB-12659-1] c33 N80-31731

PULSE COMMUNICATION

Phase shift data transmission system with
pseudo-noise synchronization code modulated
with digital data into single channel for
spacecraft communication
[NASA-CASE-XNP-00911] c08 N70-41961

Differential pulse code modulation
[NASA-CASE-MSC-12506-1] c32 N77-12239

Memory-based frame synchronizer --- for voice
data processing in digital communication systems
[NASA-CASE-GSC-12430-1] c32 N80-20453

PULSE DURATION

Frequency to analog converters with unipolar
field effect transistor for determining
potential charge by pulse duration of input

- signal
[NASA-CASE-XNP-07040] c08 N71-12500
- Electrical testing apparatus for detecting amplitude and width of transient pulse
[NASA-CASE-XNP-06519] c09 N71-12519
- Design and development of variable pulse width multiplier
[NASA-CASE-XLA-02850] c09 N71-20447
- Device for voltage conversion using controlled pulse widths and arrangements to generate ac output voltage
[NASA-CASE-MPS-10068] c10 N71-25139
- One shot multivibrator circuit for producing long duration output pulses
[NASA-CASE-ARC-10137-1] c09 N71-28468
- Pulse stretcher for narrow pulses
[NASA-CASE-MSC-14130-1] c33 N74-32711
- PULSE DURATION MODULATION**
- Pulse duration modulation multiplier system
[NASA-CASE-XER-09213] c07 N71-12390
- Variable duration pulse integrator design for integrating pulse duration modulated pulses with elimination of ripple content
[NASA-CASE-XLA-01219] c10 N71-23084
- Electric motor control system with pulse width modulation for providing automatic null seeking servo
[NASA-CASE-XNP-05195] c10 N71-24861
- Pulse duration control device for driving slow response time loads in selected sequence including switching and delay circuits and magnetic storage
[NASA-CASE-XGS-04224] c10 N71-26418
- Monostable multivibrator for producing output pulse widths with positive feedback NOR gates
[NASA-CASE-MSC-13492-1] c10 N71-28860
- Load current sensor for series pulse width modulated power supply
[NASA-CASE-GSC-10656-1] c09 N72-25249
- Buck/boost regulator
[NASA-CASE-GSC-12360-1] c33 N81-19392
- PULSE FREQUENCY MODULATION**
- Electric current measuring apparatus design including saturable core transformer and energy storage device to avoid magnetizing current errors from transformer output winding
[NASA-CASE-XGS-02439] c14 N71-19431
- Digitally controlled frequency synthesizer for pulse frequency modulation telemetry systems
[NASA-CASE-XGS-02317] c09 N71-23525
- Noninterruptable digital counter circuit design with display device for pulse frequency modulation
[NASA-CASE-XNP-05759] c08 N71-24891
- Threshold extension device for improving operating performance of frequency modulation demodulators by eliminating click-type noise impulses
[NASA-CASE-MSC-12165-1] c07 N71-33696
- Versatile LDV burst simulator
[NASA-CASE-LAR-11859-1] c35 N79-14349
- PULSE GENERATORS**
- High voltage pulse generator for testing flash and ignition limits of nonmetallic materials in controlled atmospheres
[NASA-CASE-MSC-12178-1] c09 N71-13518
- Interrogator and current driver circuit for combination with transistor flip-flop circuit
[NASA-CASE-XGS-03058] c10 N71-19547
- Electric circuit for producing high current pulse having fast rise and fall time
[NASA-CASE-XMS-04919] c09 N71-23270
- Pulse generator for synchronizing or resetting electronic signals without requiring separate external source
[NASA-CASE-XGS-03632] c09 N71-23311
- Development and characteristics of resettable monostable pulse generator with charge rundown-timing circuit
[NASA-CASE-GSC-11139] c09 N71-27016
- Pulse generating circuit for operation at very high duty cycles and repetition rates
[NASA-CASE-XNP-00745] c10 N71-28960
- Pulse coupling circuit with switch between generator and winding
[NASA-CASE-LEW-10433-1] c09 N72-22197
- Method and apparatus for nondestructive testing --- using high frequency arc discharges
[NASA-CASE-MFS-21233-1] c38 N74-15395
- Random pulse generator
[NASA-CASE-MSC-14131-1] c33 N75-19515
- Frequency tracked pulse technique for ultrasonic analysis
[NASA-CASE-LAR-12697-1] c32 N80-26571
- PULSE RADAR**
- Echo tracker/range finder for radars and sonars
[NASA-CASE-NFO-14361-1] c32 N79-26253
- PULSE RATE**
- Circuit for measuring wide range of pulse rates by utilizing high capacity counter
[NASA-CASE-XNP-06234] c10 N71-27137
- Peak holding circuit for extremely narrow pulses
[NASA-CASE-MSC-14129-1] c33 N75-18479
- Pulse transducer with artifact signal attenuator --- heart rate sensors
[NASA-CASE-FRC-11012-1] c52 N80-23969
- PULSED LASERS**
- Repetitively pulsed wavelength selective carbon dioxide laser
[NASA-CASE-ERC-10178] c16 N71-24832
- Dually mode locked Nd:YAG laser
[NASA-CASE-GSC-11746-1] c36 N75-19654
- Isotope separation using metallic vapor lasers
[NASA-CASE-NPO-13550-1] c36 N77-26477
- Pulse switching for high energy lasers
[NASA-CASE-NPO-14556-1] c36 N79-21336
- Coherently pulsed laser source
[NASA-CASE-NFO-15111-1] c36 N80-24602
- Tunable injection-locked pulsed CO2 laser
[NASA-CASE-NFO-14984-1] c36 N81-15350
- Double-beam optical method and apparatus for measuring thermal diffusivity and other molecular dynamic processes in utilizing the transient thermal lens effect
[NASA-CASE-NPO-14657-1] c74 N81-17887
- Method of and apparatus for double-exposure holographic interferometry
[NASA-CASE-MPS-25405-1] c35 N81-27459
- PULSED RADIATION**
- Development and characteristics of cyclically operable, optical shutter for use as focal plane shutter for transmitting single radiation pulses
[NASA-CASE-NPO-10758] c14 N73-14427
- PULSES**
- High resolution radar transmitting system for transmitting optical pulses to targets
[NASA-CASE-NPO-11426] c07 N73-26119
- PUMP SEALS**
- Flexible barrier membrane comprising porous substrate and incorporating liquid gallium or indium metal used as sealant barriers for spacecraft walls and pumping liquid propellants
[NASA-CASE-XNP-08881] c17 N71-28747
- Spiral groove seal --- for hydraulic rotating shaft
[NASA-CASE-LEW-10326-3] c37 N74-10474
- PUMPS**
- Piezoelectric pump for supplying fluid at high frequencies to gyroscope fluid suspension system
[NASA-CASE-XNP-05429] c26 N71-21824
- Vapor-liquid separator design with vapor driven pump for separated liquid pumping for application in propellant transfer
[NASA-CASE-XNP-04042] c15 N71-23023
- Automatically reciprocating, high pressure pump for use in spacecraft cryogenic propellants
[NASA-CASE-XNP-04731] c15 N71-24042
- Development and characteristics of variable displacement fluid pump for transforming hydraulic pressures
[NASA-CASE-MPS-20830] c15 N71-30028
- Pumping and metering dual piston system and monitor for reaction chamber constituents
[NASA-CASE-GSC-10218-1] c15 N72-21465
- Magnetocaloric pump --- for cryogenic fluids
[NASA-CASE-LEW-11672-1] c37 N74-27904
- Continuous coal processing method
[NASA-CASE-NFO-13758-2] c31 N81-15154
- A gas-to-hydraulic power converter
[NASA-CASE-MSC-18794-1] c37 N81-24445
- PUNCHED CARDS**
- Describing device for flagging punched business cards
[NASA-CASE-XLA-02705] c08 N71-15908
- Handling tool for printed circuit cards
[NASA-CASE-MFS-20453] c15 N71-29133

PUNCHES

Punch and die device for forming convolution series in thin gage metal hemispheres
[NASA-CASE-XNP-05297] c15 N71-23811

PURGING

Carbon dioxide purge systems to prevent condensation in spaces between cryogenic fuel tanks and hypersonic vehicle skin
[NASA-CASE-XLA-01967] c31 N70-42015

Developing high pressure gas purification and filtration system for use in test operations of space vehicles
[NASA-CASE-NFS-12806] c14 N71-17588

Fluid transferring system design for purging toxic, corrosive, or noxious fluids and fumes from materials handling equipment for cleansing and accident prevention
[NASA-CASE-XMS-01905] c12 N71-21089

Device for back purging thrust engines
[NASA-CASE-XMS-04826] c28 N71-28649

Purging means and method for Xenon arc lamps
[NASA-CASE-NPO-11978] c31 N78-17238

PURIFICATION

Apparatus and method capable of receiving large quantity of high pressure helium, removing impurities, and discharging at received pressure
[NASA-CASE-XNP-06888] c15 N71-24044

Purification apparatus for vaporization and fractional distillation of liquids
[NASA-CASE-XNP-08124] c15 N71-27184

Targets for producing high purity I-123
[NASA-CASE-LEW-10518-3] c25 N78-27226

Process for purification of waste water produced by a Kraft process pulp and paper mill
[NASA-CASE-NPO-13847-2] c85 N79-17747

Method of purifying metallurgical grade silicon employing reduced pressure atmospheric control
[NASA-CASE-NPO-14474-1] c26 N80-14229

Membrane consisting of polyquaternary amine ion exchange polymer network interpenetrating the chains of thermoplastic matrix polymer
[NASA-CASE-NPO-14001-1] c27 N81-14076

Electromigration process for the purification of molten silicon during crystal growth
[NASA-CASE-NPO-14831-1] c76 N81-19944

PURITY

Synthesis of high purity dianilinosilanes
[NASA-CASE-XNP-06409] c06 N71-23230

PUSH-PULL AMPLIFIERS

Frequency modulated oscillator
[NASA-CASE-NFS-23181-1] c33 N77-17351

Low current linearization of magnetic amplifier for dc transducer
[NASA-CASE-NPO-14617-1] c33 N81-24338

Push-pull converter with energy saving circuit for protecting switching transistors from peak power stress
[NASA-CASE-NPO-14316-1] c33 N81-33404

PYLONS

Decoupler pylon: Wing/store flutter suppressor
[NASA-CASE-LAR-12468-1] c08 N80-22359

PYRIDINES

Nuclear alkylated pyridine aldehyde polymers and conductive compositions thereof
[NASA-CASE-NPO-10557] c27 N78-17214

PYROELECTRICITY

Pyroelectric detector arrays
[NASA-CASE-LAR-12363-1] c35 N81-12389

PYROGEN

Molded composite pyrogen igniter for rocket motors --- solid propellant ignition
[NASA-CASE-LAR-12018-1] c20 N78-24275

PYROLYSIS

Thermal reactor and process --- liquid silicon production from silane
[NASA-CASE-NPO-14369-1] c25 N80-20338

Molten salt pyrolysis of latex --- synthetic hydrocarbon fuel production using the Guayule shrub
[NASA-CASE-NPO-14315-1] c27 N81-17261

PYROLYTIC GRAPHITE

Multislot film cooled pyrolytic graphite rocket nozzle
[NASA-CASE-XNP-04389] c28 N71-20942

PYROLYTIC MATERIALS

Design, development, and characteristics of ablation structures
[NASA-CASE-XMS-01816] c33 N71-15623

PYROMETERS

Sensor device with switches for measuring surface recession of charring and noncharring ablators
[NASA-CASE-XLA-01781] c14 N69-39975

PYROTECHNICS

Development and characteristics of squib actuated explosive disconnect for spacecraft release from launch vehicle
[NASA-CASE-NPO-11330] c33 N73-26958

Q

Q SWITCHED LASERS

Optically detonated explosive device
[NASA-CASE-NPO-11743-1] c28 N74-27425

Spatial filter for Q-switched lasers
[NASA-CASE-LEW-12164-1] c36 N77-32478

Q VALUES

Design of active RC network capable of operating at high Q values with reduced sensitivity to gain amplification and number of passive components
[NASA-CASE-ARC-10742-2] c10 N72-11256

QUADRATIC PROGRAMING

Quadrature demodulation
[NASA-CASE-GSC-12137-1] c33 N78-32338

QUADRATURES

Automatic quadrature control and measuring system --- using optical coupling circuitry
[NASA-CASE-NFS-21660-1] c35 N74-21017

QUALITATIVE ANALYSIS

Ultraviolet chromatographic detector for quantitative and qualitative analysis of compounds
[NASA-CASE-HQN-10756-1] c14 N72-25428

Analysis of volatile organic compounds --- trace amounts of organic volatiles in gas samples
[NASA-CASE-MSC-14428-1] c23 N77-17161

Fluid sample collection and distribution system --- qualitative analysis of aqueous samples from several points
[NASA-CASE-MSC-16841-1] c34 N79-24285

QUANTITATIVE ANALYSIS

Mixed liquid and vapor phase analyzer design with thermocouples for relative heat transfer measurement
[NASA-CASE-NPO-10691] c14 N71-26199

Quantitative liquid measurements in container by resonant frequencies
[NASA-CASE-XNP-02500] c18 N71-27397

Ultraviolet chromatographic detector for quantitative and qualitative analysis of compounds
[NASA-CASE-HQN-10756-1] c14 N72-25428

Nondispersive gas analysis using radiation detection for quantitative analysis
[NASA-CASE-ARC-10308-1] c06 N72-31141

Analysis of volatile organic compounds --- trace amounts of organic volatiles in gas samples
[NASA-CASE-MSC-14428-1] c23 N77-17161

Electrophotolysis oxidation system for measurement of organic concentration in water
[NASA-CASE-MSC-16497-1] c25 N79-23167

QUANTUM THEORY

III-V photocathode with nitrogen doping for increased quantum efficiency
[NASA-CASE-NPO-12134-1] c33 N76-31409

QUARTZ

Ultraviolet filter of thorium fluoride and cryolite on quartz base
[NASA-CASE-XNP-02340] c23 N69-24332

Method for attaching a fused-quartz mirror to a conductive metal substrate
[NASA-CASE-NFS-23405-1] c26 N77-29260

Quartz ball valve
[NASA-CASE-NFO-14473-1] c37 N80-23654

QUARTZ LAMPS

High intensity heat and light unit containing quartz lamp elements protectively positioned to withstand severe environmental stress
[NASA-CASE-XLA-00141] c09 N70-33312

Light shield and cooling apparatus --- high intensity ultraviolet lamp
[NASA-CASE-LAR-10089-1] c34 N74-23066

R

RACKS (FRAMES)

Design and development of test stand system for supporting test items in vacuum chamber
[NASA-CASE-MFS-21362] c11 N73-20267

Thrust-isolating mounting --- characteristics of support for loads mounted in spacecraft
[NASA-CASE-MFS-21680-1] c18 N74-27397

Automated syringe sampler --- remote sampling of air and water
[NASA-CASE-LAR-12308-1] c35 N81-29407

RADAR ANTENNAS
Interferometric tuning acquisition and tracking radar antenna system
[NASA-CASE-XMS-09610] c07 N71-24625

Variable beamwidth antenna --- with multiple beam, variable feed system
[NASA-CASE-GSC-11862-1] c32 N76-18295

Highly efficient antenna system using a corrugated horn and scanning hyperbolic reflector
[NASA-CASE-NPO-13568-1] c32 N76-21365

Baseband signal combiner for large aperture antenna array
[NASA-CASE-NPO-14641-1] c32 N81-29308

RADAR ATTENUATION
FM/CW radar system
[NASA-CASE-MFS-22234-1] c32 N79-10264

RADAR DATA
Charge-coupled device data processor for an airborne imaging radar system
[NASA-CASE-NPO-13587-1] c32 N77-32342

RADAR ECHOES
Charge-coupled device data processor for an airborne imaging radar system
[NASA-CASE-NPO-13587-1] c32 N77-32342

RADAR EQUIPMENT
Spacecraft transponder and ground station radar system for mapping planetary surfaces
[NASA-CASE-NPO-11001] c07 N72-21118

FM/CW radar system
[NASA-CASE-MFS-22234-1] c32 N79-10264

RADAR IMAGERY
Method of locating persons in distress --- by using radar imagery from radar reflectors
[NASA-CASE-LAR-11390-1] c32 N77-21267

Clutter free synthetic aperture radar correlator
[NASA-CASE-NPO-14035-1] c32 N78-18266

Multibeam single frequency synthetic aperture radar processor for imaging separate range swaths
[NASA-CASE-NPO-14525-1] c32 N79-19195

Radar target for remotely sensing hydrological phenomena
[NASA-CASE-LAR-12344-1] c43 N80-18498

Multibeam single frequency synthetic aperture radar processor for imaging separate range swaths
[NASA-CASE-NPO-14525-2] c32 N80-32607

RADAR MEASUREMENT
Thickness measurement system
[NASA-CASE-MFS-23721-1] c31 N79-28370

RADAR RANGE
Radar signal receiver arrangement for extending range and increasing signal to noise ratio
[NASA-CASE-XNP-00748] c07 N70-36911

RADAR RECEIVERS
Polarization diversity monopulse tracking receiver design without radio frequency switches
[NASA-CASE-XGS-03501] c09 N71-20664

RADAR RECEPTION
Radar signal receiver arrangement for extending range and increasing signal to noise ratio
[NASA-CASE-XNP-00748] c07 N70-36911

RADAR REFLECTORS
Inflatable radar reflector unit - lightweight, highly reflective to electromagnetic radiation, and adaptable for erection and deployment with minimum effort and time
[NASA-CASE-XMS-00893] c07 N70-40063

Method of locating persons in distress --- by using radar imagery from radar reflectors
[NASA-CASE-LAR-11390-1] c32 N77-21267

RADAR TARGETS
Radar target for remotely sensing hydrological phenomena
[NASA-CASE-LAR-12344-1] c43 N80-18498

RADAR TRACKING

Tracking antenna system with array for synchronous satellite or ground based radar
[NASA-CASE-GSC-10553-1] c07 N71-19854

Polarization diversity monopulse tracking receiver design without radio frequency switches
[NASA-CASE-XGS-03501] c09 N71-20864

Monopulse tracking system with antenna array of three radiators for deriving azimuth and elevation indications
[NASA-CASE-XGS-01155] c10 N71-21483

Plastic sphere for radar tracking and calibration
[NASA-CASE-XLA-11154] c07 N72-21117

Echo tracker/range finder for radars and sonars
[NASA-CASE-NPO-14361-1] c32 N79-26253

RADAR TRANSMITTERS

High resolution radar transmitting system for transmitting optical pulses to targets
[NASA-CASE-NPO-11426] c07 N73-26119

RADIAL FLOW

Radial heat flux transformer for use in heating and cooling processes
[NASA-CASE-NPO-10828] c33 N72-17948

Axially and radially controllable magnetic bearing
[NASA-CASE-GSC-11551-1] c37 N76-18459

RADIANCE

Method and apparatus for measuring shock layer radiation distribution about high velocity objects
[NASA-CASE-XAC-02970] c14 N69-39896

RADIANT COOLING

Direct radiation cooling of linear beam collector tubes
[NASA-CASE-XNP-09227] c15 N69-24319

High thermal emittance black surface coatings and process for applying to metal and metal alloy surfaces used in radiative cooling of spacecraft
[NASA-CASE-XLA-06199] c15 N71-24875

Method for attaching a fused-quartz mirror to a conductive metal substrate
[NASA-CASE-MFS-23405-1] c26 N77-29260

RADIANT FLUX DENSITY

High intensity radiant energy pulse source for calibrating heat transfer gages with thermoluminescent shutter activation
[NASA-CASE-ARC-10178-1] c09 N72-17152

Microwave power transmission beam safety system
[NASA-CASE-NPO-14224-1] c33 N80-18287

RADIANT HEATING

High intensity heat and light unit containing quartz lamp elements protectively positioned to withstand severe environmental stress
[NASA-CASE-XLA-00141] c09 N70-33312

High temperature source of thermal radiation
[NASA-CASE-XLE-00490] c33 N70-34545

Refractory filament series circuitry for radiant heater
[NASA-CASE-XLE-00387] c33 N70-34812

Unfired ceramic insulation for protection from radiant heating environments
[NASA-CASE-MFS-14253] c33 N71-24858

Portable linear-focused solar thermal energy collecting system
[NASA-CASE-NPO-13734-1] c44 N78-10554

RADIATION

Development of radiant energy sensor to detect the radiant energy wavelength bands from portions of radiating body
[NASA-CASE-EEC-10174] c14 N72-25409

Development of thermopile with sensor surface to receive radiant energy and to provide measurement of energy quantity
[NASA-CASE-NPO-11493] c14 N73-12447

Analog to digital converter for two-dimensional radiant energy array computers
[NASA-CASE-GSC-11839-3] c60 N77-32731

Memory device for two-dimensional radiant energy array computers
[NASA-CASE-GSC-11839-2] c60 N78-10709

RADIATION ABSORPTION

NDIR gas analyzer based on absorption modulation ratios for known and unknown samples
[NASA-CASE-ARC-10802-1] c35 N75-30502

Method for making an aluminum or copper substrate panel for selective absorption of solar energy
[NASA-CASE-MFS-23518-1] c44 N79-11469

RADIATION COUNTERS

Particle detector for indicating incidence and energy of minute space particles
[NASA-CASE-XLA-00135] c14 N70-33322

Sensing method and device for determining orientation of space vehicle or satellite by using particle traps
[NASA-CASE-XGS-00466] c21 N70-34297

Particle beam power density detection and measurement apparatus
[NASA-CASE-XLE-00243] c14 N70-38602

Automatic baseline stabilization for ionization detector used in gas chromatograph
[NASA-CASE-XNP-03128] c10 N70-41991

Method of forming thin window drifted silicon charged particle detector
[NASA-CASE-XLE-00808] c24 N71-10560

Development of dosimeter for measuring absorbed dose of high energy ionizing radiation
[NASA-CASE-XLA-03645] c14 N71-20430

Apparatus for detecting particle emission lower than noise level of multiplier tube
[NASA-CASE-XLA-07813] c14 N72-17328

Radiation or charged particle detector and amplifier
[NASA-CASE-NPO-12128-1] c14 N73-32317

Coaxial anode wire for gas radiation counters
[NASA-CASE-GSC-11492-1] c35 N74-26949

Particle parameter analyzing system --- x-y plotter circuits and display
[NASA-CASE-XLE-06094] c33 N76-17293

Method and means for helium/hydrogen ratio measurement by alpha scattering
[NASA-CASE-NPO-14079-1] c25 N80-20334

RADIATION DAMAGE

Addition of group 3 elements to silicon semiconductor material for increased resistance to radiation damage in solar cells
[NASA-CASE-XLE-02798] c26 N71-23654

Recovering efficiency of solar cells damaged by environmental radiation through thermal annealing
[NASA-CASE-XGS-04047-2] c03 N72-11062

Photomultiplier circuit including means for rapidly reducing the sensitivity thereof --- and protection from radiation damage
[NASA-CASE-ABC-10593-1] c33 N74-27682

RADIATION DETECTORS

Radiation source and detection system for measuring amount of liquid inside tanks independently of liquid configuration
[NASA-CASE-HSC-12280] c27 N71-16348

Detection instrument for light emitted from ATP biochemical reaction
[NASA-CASE-XGS-05534] c23 N71-16355

Attitude sensor with scanning mirrors for detecting orientation of space vehicle with respect to planet
[NASA-CASE-XLA-00793] c21 N71-22880

Mosaic semiconductor radiation detector and position indicator systems engineering for low energy particles
[NASA-CASE-XGS-03230] c14 N71-23401

Nondispersive gas analysis using radiation detection for quantitative analysis
[NASA-CASE-ABC-10308-1] c06 N72-31141

Radiation source tracker comprised of sectorized matrix of detectors with output voltages corresponding to irradiance levels
[NASA-CASE-NPO-11686] c14 N73-25462

Radiation or charged particle detector and amplifier
[NASA-CASE-NPO-12128-1] c14 N73-32317

Mossbauer spectrometer radiation detector
[NASA-CASE-LAR-11155-1] c35 N74-15091

High field CdS detector for infrared radiation
[NASA-CASE-LAR-11027-1] c35 N74-18C88

Flame detector operable in presence of proton radiation
[NASA-CASE-MFS-21577-1] c19 N74-29410

Wide angle sun sensor --- consisting of cylinder, insulation and pair of detectors
[NASA-CASE-NPO-13327-1] c35 N75-23910

Detector absorptivity measuring method and apparatus
[NASA-CASE-LAR-10907-1] c35 N76-29551

Wedge immersed thermistor bolometers
[NASA-CASE-XGS-01245-1] c35 N79-33449

Miniature spectrally selective dosimeter

[NASA-CASE-LAR-12469-1] c35 N81-12388

X-ray position detector

[NASA-CASE-NPO-12087-1] c74 N81-19898

RADIATION DISTRIBUTION

Space simulator with uniform test region radiation distribution, adapted to simulate Venus solar radiations
[NASA-CASE-XNP-00459] c11 N70-38675

RADIATION DOSAGE

Development of dosimeter for measuring absorbed dose of high energy ionizing radiation
[NASA-CASE-XLA-03645] c14 N71-20430

Method for analyzing radiation sensitivity of integrated circuits
[NASA-CASE-NPO-14350-1] c33 N80-14332

RADIATION EFFECTS

Method for temperature compensating semiconductor gages by exposure to high energy radiation
[NASA-CASE-XLA-04555-1] c14 N71-25892

RADIATION HARDENING

Radiation hardening of MOS devices by boron --- for stabilizing gate threshold potential of field effect device
[NASA-CASE-GSC-11425-1] c76 N74-20329

RADIATION HAZARDS

Miniature spectrally selective dosimeter
[NASA-CASE-LAR-12469-1] c35 N81-12388

RADIATION MEASUREMENT

Development of thermopile with sensor surface to receive radiant energy and to provide measurement of energy quantity
[NASA-CASE-NPO-11493] c14 N73-12447

RADIATION MEASURING INSTRUMENTS

Rocket-borne aspect sensor consisting of radiation sensor, apertured disk, commutator, and counting circuits
[NASA-CASE-XGS-08266] c14 N69-27432

Infrared scanning system for maintaining spacecraft orientation with earth reference
[NASA-CASE-XLA-00120] c21 N70-33181

Multiple wavelength radiation measuring instrument for determining hot body or gas temperature
[NASA-CASE-XLE-00011] c14 N70-41946

Development of method for improving signal to noise ratio and accuracy of Wheatstone bridge type radiation measuring instrument
[NASA-CASE-XLA-02810] c14 N71-25901

Development of thermopile with sensor surface to receive radiant energy and to provide measurement of energy quantity
[NASA-CASE-NPO-11493] c14 N73-12447

Phototransistor with base collector junction diode for integration into photo sensor arrays
[NASA-CASE-MFS-20407] c09 N73-19235

Method and apparatus for measuring electromagnetic radiation
[NASA-CASE-LEW-11159-1] c14 N73-28488

Design of gamma ray spectrometer for measurement of intense radiation using Compton scattering effect
[NASA-CASE-MFS-21441-1] c14 N73-30392

Coaxial anode wire for gas radiation counters
[NASA-CASE-GSC-11492-1] c35 N74-26949

Cloud cover sensor
[NASA-CASE-NPO-14936-1] c47 N80-26992

RADIATION MEDICINE

Method of producing I-123 --- by bombardment of cesium causing spallation
[NASA-CASE-LEW-11390-2] c25 N76-27383

RADIATION PROTECTION

Development of method for protecting large and oddly shaped areas from radiant and convective heat
[NASA-CASE-XNP-01310] c33 N71-28952

Cooling and radiation protection of ruby lasers using copper sulfate solution in alcohol
[NASA-CASE-MFS-20180] c16 N72-12440

Photomultiplier circuit including means for rapidly reducing the sensitivity thereof --- and protection from radiation damage
[NASA-CASE-ABC-10593-1] c33 N74-27682

RADIATION SHIELDING

Encapsulated heater forming hollow body for cathode used in ion thruster
[NASA-CASE-LEW-10814-1] c28 N70-35422

- Describing hot filament type Bayard-Alpert ionization gage with ion collector buried or removed from grid structure
[NASA-CASE-XLA-07424] c14 N71-18482
- Sealed housing for protecting electronic equipment against electromagnetic interference
[NASA-CASE-MSC-12168-1] c09 N71-18600
- Internal labyrinth and shield structure to improve electrical isolation of propellant feed source from ion thruster
[NASA-CASE-LEW-10210-1] c28 N71-26781
- Apparatus for aligning shadow shields and cryogenic storage tanks in outer space with the sun
[NASA-CASE-KSC-10622-1] c31 N72-21893
- Light shield and cooling apparatus --- high intensity ultraviolet lamp
[NASA-CASE-LAR-10089-1] c34 N74-23066
- RADIATION SOURCES**
- Sight switch using infrared source and sensor mounted beside eye
[NASA-CASE-XMP-03934] c09 N71-22585
- Apparatus for obtaining isotropic irradiation on film emulsion from parallel radiation source
[NASA-CASE-MPS-20095] c24 N72-11595
- Radiation source tracker comprised of sectorized matrix of detectors with output voltages corresponding to irradiance levels
[NASA-CASE-NPO-11686] c14 N73-25462
- High powered arc electrodes --- producing solar simulator radiation
[NASA-CASE-LEW-11162-1] c33 N74-12913
- Electric arc light source having undercut recessed anode
[NASA-CASE-ARC-10266-1] c33 N75-29318
- RADIATION SPECTRA**
- Maksutov spectrograph for low light level research
[NASA-CASE-XLA-10402] c14 N71-29041
- RADIATION THERAPY**
- A cervix-to-rectum measuring device in a radiation applicator for use in the treatment of cervical cancer
[NASA-CASE-GSC-12081-2] c52 N77-26796
- RADIATION TOLERANCE**
- Ultraviolet radiation resistant alkali-metal silicate coatings for temperature control of spacecraft
[NASA-CASE-XGS-04119] c18 N69-39979
- Doping silicon material with gadolinium to increase radiation resistance of solar cells
[NASA-CASE-XLE-02792] c26 N71-10607
- Improving radiation resistance of silicon semiconductor junctions by doping with lithium
[NASA-CASE-XGS-07801] c09 N71-12513
- Radiation hardening of MOS devices by boron --- for stabilizing gate threshold potential
[NASA-CASE-GSC-11425-2] c76 N75-25730
- Method for analyzing radiation sensitivity of integrated circuits
[NASA-CASE-NPO-14350-1] c33 N80-14332
- RADIATIVE HEAT TRANSFER**
- Heat flux sensor assembly with proviso for heat shield to reduce radiative transfer between sensor elements
[NASA-CASE-XMS-05909-1] c14 N69-27459
- Capillary radiator for carrying heat transfer liquid in planetary spacecraft structures
[NASA-CASE-XLE-03307] c33 N71-14035
- Transient heat transfer gage for measuring total radiant intensity from far ultraviolet and ionized high temperature gases
[NASA-CASE-XNP-09802] c33 N71-15641
- Construction and method of arranging plurality of ion engines to form cluster thereby increasing efficiency and control by decreasing heat radiated to space
[NASA-CASE-XNP-02923] c28 N71-23081
- Apparatus and method for heating a material in a transparent ampoule --- crystal growth
[NASA-CASE-MPS-25436-1] c76 N81-30012
- RADIATORS**
- Development and characteristics of natural circulation radiator for use with nuclear power plants installed in lunar space stations
[NASA-CASE-XHO-03673] c33 N71-29046
- RADIO ANTENNAS**
- Low loss parasitic probe antenna for prelaunch tests of spacecraft antennas
[NASA-CASE-XKS-09348] c09 N71-13521
- VHF/UHF parasitic probe antenna for spacecraft communication
[NASA-CASE-XKS-09340] c07 N71-24614
- Development and characteristics of extensible dipole antenna using deformable tubular metallic strip element
[NASA-CASE-HQN-00937] c07 N71-28979
- Highly efficient antenna system using a corrugated horn and scanning hyperbolic reflector
[NASA-CASE-NPO-13568-1] c32 N76-21365
- RADIO ASTRONOMY**
- Synchronous detection system for detecting weak radio astronomical signals
[NASA-CASE-XNP-09832] c30 N71-23723
- RADIO BEACONS**
- RF beam center location method and apparatus for power transmission system
[NASA-CASE-NPO-13821-1] c44 N78-28594
- RADIO COMMUNICATION**
- System for synchronizing synthesizers of communication systems
[NASA-CASE-GSC-12146-1] c32 N79-20296
- RADIO CONTROL**
- Radio frequency controlled solid state switch
[NASA-CASE-ARC-10136-1] c09 N72-22202
- RADIO EQUIPMENT**
- System for synchronizing synthesizers of communication systems
[NASA-CASE-GSC-12146-1] c32 N79-20296
- RADIO FREQUENCIES**
- Helical coaxial resonator RF filter
[NASA-CASE-XGS-02816] c07 N69-24323
- Automatic gain control amplifier system
[NASA-CASE-XMS-05307] c09 N69-24330
- Method and apparatus for bowing of instrument panels to improve radio frequency shielded enclosure
[NASA-CASE-XMF-09422] c07 N71-19436
- Development of automatic frequency discriminators and control for phase lock loop providing frequency preset capabilities
[NASA-CASE-XMF-08665] c10 N71-19467
- System generating sidereal frequency signals from signals of standard solar frequency without use of mixing operations or feedback loops
[NASA-CASE-XGS-02610] c14 N71-23174
- Radio frequency coaxial filter to provide dc isolation and low frequency signal rejection in audio range
[NASA-CASE-XGS-01418] c09 N71-23573
- Variable frequency nuclear magnetic resonance spectrometer providing drive signals over wide frequency range and minimizing noise effects
[NASA-CASE-XNP-09830] c14 N71-26266
- High efficiency transformerless amplitude modulator coupled to RF power amplifier
[NASA-CASE-GSC-10668-1] c07 N71-28430
- Technique and equipment for sputtering using apertured electrode and pulsed substrate bias
[NASA-CASE-LEW-10920-1] c17 N73-24569
- Radio frequency source resistance measuring instruments of varied design
[NASA-CASE-NPO-11291-1] c14 N73-30388
- Multichannel logarithmic RF level detector
[NASA-CASE-LAR-11021-1] c32 N76-14321
- Ion and electron detector for use in an ICR spectrometer
[NASA-CASE-NPO-13479-1] c35 N77-10492
- Radio frequency arraying method for receivers
[NASA-CASE-NPO-14328-1] c32 N80-18253
- Precise RF timing signal distribution to remote stations --- fiber optics
[NASA-CASE-NPO-14749-1] c32 N81-14186
- Pulsed phase locked loop strain monitor
[NASA-CASE-LAR-12772-1] c33 N81-15195
- High stability buffered phase comparator
[NASA-CASE-GSC-12645-1] c33 N81-31482
- RADIO FREQUENCY DISCHARGE**
- Electric discharge for treatment of trace contaminants
[NASA-CASE-ARC-10975-1] c33 N79-15245
- RADIO FREQUENCY HEATING**
- Gyrotron transmitting tube
[NASA-CASE-LEW-13429-1] c33 N81-16384
- RADIO FREQUENCY INTERFERENCE**
- Radio frequency noise generator having microwave slow-wave structure in gas discharge plasma

- [NASA-CASE-XER-11019] c09 N71-23598
System for interference signal nulling by
polarization adjustment
[NASA-CASE-NFO-13140-1] c32 N75-24982
Systems and methods for determining radio
frequency interference
[NASA-CASE-GSC-12150-1] c32 N79-11265
Apparatus and method for determining the
position of a radiant energy source
[NASA-CASE-GSC-12147-1] c32 N81-27341
- RADIO FREQUENCY SHIELDING**
Gunn effect microwave diodes with RF shielding
[NASA-CASE-ERC-10119] c26 N72-21701
Process for making RF shielded cable connector
assemblies and resulting structures
[NASA-CASE-GSC-11215-1] c09 N73-28083
- RADIO INTERFEROMETERS**
System for real-time crustal deformation
monitoring
[NASA-CASE-NPO-14124-1] c46 N80-14603
- RADIO RECEIVERS**
Radio receiver with array of independently
steerable antennas for deep space communication
[NASA-CASE-XLA-00901] c07 N71-10775
Development of optimum pre-detection diversity
combining receiving system adapted for use
with amplitude modulation, phase modulation,
and frequency modulation systems
[NASA-CASE-XGS-00740] c07 N71-23098
Paraday rotation measurement method and apparatus
--- to receive RF signals from spacecraft
which exhibits polarization characteristics
due to spin stabilization
[NASA-CASE-NPO-14839-1] c35 N80-16313
Radio frequency arraying method for receivers
[NASA-CASE-NPO-14328-1] c32 N80-18253
Interferometric locating system
[NASA-CASE-NPO-14173-1] c04 N80-32359
- RADIO RELAY SYSTEMS**
Satellite radio communication system with remote
steerable antenna
[NASA-CASE-XNP-02389] c07 N71-28900
Systems and methods for determining radio
frequency interference
[NASA-CASE-GSC-12150-1] c32 N79-11265
- RADIO SIGNALS**
Erectable, inflatable, radio signal reflecting
passive communication satellite
[NASA-CASE-XLA-00210] c30 N70-40309
Synchronous detection system for detecting weak
radio astronomical signals
[NASA-CASE-XNP-09832] c30 N71-23723
- RADIO SOURCES (ASTRONOMY)**
Conical scan tracking system employing a large
antenna
[NASA-CASE-NPO-14009-1] c32 N79-13214
- RADIO STARS**
System generating sidereal frequency signals
from signals of standard solar frequency
without use of mixing operations or feedback
loops
[NASA-CASE-XGS-02610] c14 N71-23174
- RADIO TELEMETRY**
Digital telemetry system apparatus to reduce
tape recorder wow and flutter noise during
playback
[NASA-CASE-XGS-01812] c07 N71-23001
- RADIO TELESCOPES**
Antenna grout replacement system
[NASA-CASE-NPO-15205-1] c37 N81-19457
- RADIO TRANSMITTERS**
Vehicle locating system utilizing AM
broadcasting station carriers
[NASA-CASE-NPO-13217-1] c32 N75-26194
Aircraft-mounted crash-activated transmitter
device
[NASA-CASE-MPS-16609-3] c03 N76-32140
Low-frequency radio navigation system
[NASA-CASE-NPO-15264-1] c04 N81-22036
- RADIO WAVES**
Gunn effect microwave diodes with RF shielding
[NASA-CASE-ERC-10119] c26 N72-21701
- RADIOACTIVE ISOTOPES**
Thermally cascaded thermoelectric generator with
radioisotopic heat source
[NASA-CASE-NPO-10753] c03 N72-26031
Protected isotope heat source --- for
atmospheric reentry protection and heat
transmission to spacecraft
- [NASA-CASE-LEW-11227-1] c73 N75-30876
- RADIOBIOLOGY**
Production of I-123 for use as
radiopharmaceutical for low radiation exposure
[NASA-CASE-LEW-10518-1] c24 N72-33681
- RADIOGRAPHY**
Nondestructive radiographic tests of resistance
welds
[NASA-CASE-XNP-02588] c15 N71-18613
Method and system for in vivo measurement of
bone tissue using a two level energy source
[NASA-CASE-MSC-14276-1] c52 N77-14737
Low X-ray absorption aneurism clips
[NASA-CASE-LAB-12650-1] c52 N81-29768
- RADIOLYSIS**
Process for making anhydrous metal halides
[NASA-CASE-LEW-11860-1] c37 N76-18458
- RADIOMETERS**
Miniaturized radiometer for detecting low level
thermal radiation
[NASA-CASE-XLA-04556] c14 N69-27484
Black body radiometer design with temperature
sensing and cavity heat source cone winding
[NASA-CASE-XNP-09701] c14 N71-26475
Black body radiometer having isothermally
surrounded cavity for ultraviolet, visible,
and infrared radiation
[NASA-CASE-NFO-10810] c14 N71-27323
Thermoelectric radiometer using polymer film
as capacitor
[NASA-CASE-ARC-10138-1] c14 N72-24477
Development of radiant energy sensor to detect
the radiant energy wavelength bands from
portions of radiating body
[NASA-CASE-ERC-10174] c14 N72-25409
Development of radiometric sensor to warn
aircraft pilots of region of clear air
turbulence along flight path
[NASA-CASE-ERC-10081] c14 N72-28437
Radiometric measuring system for solar activity
and atmospheric attenuation and emission
[NASA-CASE-ERC-10276] c14 N73-26432
Steady state thermal radiometers
[NASA-CASE-MPS-21108-1] c34 N74-27861
Method and apparatus for precision control of
radiometer
[NASA-CASE-NPO-15398-1] c35 N81-33449
- RADIOSONDES**
Induction powered biological radiosonde
[NASA-CASE-ARC-11120-1] c52 N80-18691
- RAIN**
Precipitation detector and mechanism for
stopping and restarting machinery at
initiation and cessation of rain
[NASA-CASE-XLA-02619] c10 N71-26334
Environmental fog/rain visual display system for
aircraft simulators
[NASA-CASE-ARC-11158-1] c09 N79-33220
- RAMJET ENGINES**
Telescoping-spike supersonic nozzle for turbojet
or ramjet engines
[NASA-CASE-XLE-00005] c28 N70-39899
Hypersonic airbreathing missile
[NASA-CASE-LAB-12264-1] c15 N78-32168
- RAMPES (STRUCTURES)**
Automated multi-level vehicle parking system
[NASA-CASE-NPO-13058-1] c37 N77-22480
- RANDOM ACCESS MEMORY**
Memory-based parallel data output controller
[NASA-CASE-GSC-12447-1] c60 N80-21987
- RANDOM LOADS**
Fatigue testing device applying random discrete
load levels to test specimen and applicable to
aircraft structures
[NASA-CASE-XLA-02131] c32 N70-42003
- RANDOM NOISE**
Circuits for amplitude limiting of random noise
inputs
[NASA-CASE-NPO-10169] c10 N71-24844
Digital servo control of random sound test
excitation --- in reverberant acoustic chamber
[NASA-CASE-NFO-11623-1] c71 N74-31148
Random pulse generator
[NASA-CASE-MSC-14131-1] c33 N75-19515
Pseudo noise code and data transmission method
and apparatus
[NASA-CASE-GSC-12017-1] c32 N77-30308
- RANGE (EXTREMES)**
Logarithmic circuit with wide dynamic range

RANGE FINDERS

SUBJECT INDEX

[NASA-CASE-GSC-12145-1] c33 N78-32339

RANGE FINDERS

Closed loop radio communication ranging system to determine distance between moving airborne vehicle and fixed ground station
[NASA-CASE-XNP-01501] c21 N70-41930

Digital demodulator-correlator
[NASA-CASE-NPO-13982-1] c32 N79-14267

Echo tracker/range finder for radars and sonars
[NASA-CASE-NPO-14361-1] c32 N79-26253

Doppler radar having phase modulation of both transmitted and reflected return signals --- range-finding
[NASA-CASE-MSC-18675-1] c32 N81-29312

RANGEFINDING

Equipment for testing of ground station ranging equipment and spacecraft transponders
[NASA-CASE-XMS-05454-1] c07 N71-12391

Spacecraft ranging system
[NASA-CASE-NPO-10066] c09 N71-18598

Binary coded sequential acquisition ranging system for distance measurements
[NASA-CASE-NPO-11194] c08 N72-25209

Loop transponder for regenerating code of mu-type ranging system
[NASA-CASE-NPO-11707] c07 N73-25161

Orbital and entry tracking accessory for globes --- to provide range requirements for reentry vehicles to any landing site
[NASA-CASE-LAR-10626-1] c19 N74-21015

RARE EARTH COMPOUNDS

Including didymium hydrate in nickel hydroxide of positive electrode of storage batteries to increase ampere hour capacity
[NASA-CASE-XGS-03505] c03 N71-10608

RARE GASES

Inert gas metallic vapor laser
[NASA-CASE-NPO-13449-1] c36 N75-32441

RAREFIED GASES

Magnetically controlled plasma accelerator capable of ignition in low density gaseous environment
[NASA-CASE-XLA-00327] c25 N71-29184

RATES (PER TIME)

Apparatus and digital technique for coding rate data
[NASA-CASE-LAR-10128-1] c08 N73-20217

RC CIRCUITS

RC transistor circuit to indicate each pulse of pulse train and occurrence of nth pulse
[NASA-CASE-XMF-00906] c09 N70-41655

Device utilizing RC rate generators for continuous slow speed measurement
[NASA-CASE-XMF-02966] c10 N71-24863

Digital data handling circuits for pulse amplifiers
[NASA-CASE-XNP-01068] c10 N71-28739

Design of active RC network capable of operating at high Q values with reduced sensitivity to gain amplification and number of passive components
[NASA-CASE-ARC-10042-2] c10 N72-11256

Active RC filter networks and amplifiers for deep space magnetic field measurement
[NASA-CASE-XAC-05462-2] c10 N72-17171

RC networks with voltage amplifier, RC input circuit, and positive feedback
[NASA-CASE-ARC-10020] c10 N72-17172

Multiloop RC active filter network with low parameter sensitivity and low amplifier gain
[NASA-CASE-ARC-10192] c09 N72-21245

Temperature control system comprised of wheatstone bridge with RC circuit
[NASA-CASE-NPO-11304] c14 N73-26430

Diode-quad bridge circuit means
[NASA-CASE-ARC-10364-3] c33 N75-19520

REACTION CONTROL

Development of voice operated controller for controlling reaction jets of spacecraft
[NASA-CASE-XLA-04063] c31 N71-33160

REACTION TIME

An improved synthesis of 2, 4, 8, 10-tetroxaspiro (5.5)undecane
[NASA-CASE-ARC-11243-1] c27 N79-30375

Improved synthesis of polyformals
[NASA-CASE-ARC-11244-1] c27 N79-30376

Pseudonoise code tracking loop
[NASA-CASE-MSC-18035-1] c32 N81-15179

REACTION WHEELS

Satellite stabilization reaction wheel scanner
[NASA-CASE-XGS-02629] c14 N71-21082

Gravity gradient attitude control system with gravity gradiometer and reaction wheels for artificial satellite attitude control
[NASA-CASE-GSC-10555-1] c21 N71-27324

REACTIVITY

Absorbing gas reactivity control system for minimizing power distribution and perturbation in nuclear reactors
[NASA-CASE-XLE-04599] c22 N72-20597

REACTOR CORES

Reactor heated in-core diodes for energy conversion
[NASA-CASE-NPO-10542] c09 N72-27228

REACTOR DESIGN

Non-equilibrium radiation nuclear reactor
[NASA-CASE-HQN-10841-1] c73 N78-19920

REACTOR MATERIALS

Zirconium modified nickel-copper alloy
[NASA-CASE-LEW-12245-1] c26 N77-20201

REACTOR PHYSICS

Non-equilibrium radiation nuclear reactor
[NASA-CASE-HQN-10841-1] c73 N78-19920

READOUT

Flow angle sensor and remote readout system for use with cryogenic fluids
[NASA-CASE-XLE-04503] c14 N71-24864

System for checking status of several double-throw switches by readout indications
[NASA-CASE-XLA-08799] c10 N71-27272

Magneto-optic detection system with noise cancellation
[NASA-CASE-NPO-11954-1] c35 N78-29421

Laser measuring system for incremental assemblies --- measuring wire-wrapped frame assemblies in spark chambers
[NASA-CASE-GSC-12321-1] c36 N80-18380

REAL TIME OPERATION

Respiratory analysis system to determine gas flow rate and frequency of respiration and expiration cycles in real time
[NASA-CASE-MSC-13436-1] c05 N73-32015

Real time moving scene holographic camera system
[NASA-CASE-MFS-21087-1] c35 N74-17153

Real time, large volume, moving scene holographic camera system
[NASA-CASE-MFS-22537-1] c35 N75-27328

Carbon monoxide monitor --- using real time operation
[NASA-CASE-MFS-22060-1] c35 N75-29380

Real time analysis of voiced sounds
[NASA-CASE-NPO-13465-1] c32 N76-31372

Real time reflectometer --- measurement of specular reflectance
[NASA-CASE-MFS-23118-1] c35 N77-31465

Contour detector and data acquisition system for the left ventricular outline
[NASA-CASE-ARC-10985-1] c52 N79-10724

Azimuth correlator for real-time synthetic aperture radar image processing
[NASA-CASE-NFC-14019-1] c32 N79-14268

System for real-time crustal deformation monitoring
[NASA-CASE-NFO-14124-1] c46 N80-14603

Constant magnification optical tracking system
[NASA-CASE-NPO-14813-1] c74 N80-24152

X-ray position detector
[NASA-CASE-NPO-12087-1] c74 N81-19898

REBREATHING

Portable breathing system --- a breathing apparatus using a rebreathing system of heat exchangers for carbon dioxide removal
[NASA-CASE-MSC-16182-1] c54 N80-10799

RECEIVERS

Semiconductor in resonant cavity for improving signal to noise ratio of communication receiver
[NASA-CASE-MSC-12259-1] c07 N70-12616

Improved phase lock loop for receiver in multichannel telemetry system with suppressed carrier
[NASA-CASE-NPO-11593-1] c07 N73-28012

Automatic carrier acquisition system for phase locked loop receiver
[NASA-CASE-NPO-11628-1] c07 N73-30113

Coherent receiver employing nonlinear coherence detection for carrier tracking
[NASA-CASE-NPO-11921-1] c32 N74-30523

- Low distortion receiver for bi-level baseband
PCM waveforms
[NASA-CASE-MSC-14557-1] c32 N76-10249
- Wideband heterodyne receiver for laser
communication system
[NASA-CASE-GSC-12053-1] c32 N77-28346
- Receiving and tracking phase modulated signals
[NASA-CASE-MSC-16170-2] c32 N81-16338
- Self-calibrating threshold detector
[NASA-CASE-MSC-16370-1] c35 N81-19427
- RECONSTRUCTION**
Method and means for recording and
reconstructing holograms without use of
reference beam
[NASA-CASE-ERC-10020] c16 N71-26154
- RECORDING HEADS**
Electromagnetic transducer recording head having
a laminated core section and tapered gap
[NASA-CASE-NPO-10711-1] c35 N77-21392
- RECORDING INSTRUMENTS**
Weighing and recording device for obtaining
precise automatic record of small changes in
force
[NASA-CASE-XLA-02605] c14 N71-10773
- Blood pressure measuring system for separately
recording dc and ac pressure signals of
Korotkoff sounds
[NASA-CASE-XMS-06061] c05 N71-23317
- Helical recorder for multiple channel recording
[NASA-CASE-GSC-10614-1] c09 N72-11224
- Thermomagnetic recording and magneto-optic
playback system having constant intensity
laser beam control
[NASA-CASE-NPO-11317-2] c36 N74-13205
- Holography utilizing surface plasmon resonances
[NASA-CASE-MFS-22040-1] c35 N74-26946
- Measuring probe position recorder
[NASA-CASE-LAR-10806-1] c35 N74-32877
- RECOVERABILITY**
Ejectable underwater sound source recovery
assembly
[NASA-CASE-LAR-10595-1] c35 N74-16135
- RECOVERABLE LAUNCH VEHICLES**
Techniques for recovery of multistage rocket
vehicles by providing lifting surfaces on
individual sections
[NASA-CASE-XMF-00389] c31 N70-34176
- Orbiter/launch system
[NASA-CASE-LAR-12250-1] c14 N81-26161
- RECOVERABLE SPACECRAFT**
Describing assembly for opening stabilizing and
decelerating flaps of flight capsules used in
space research
[NASA-CASE-XMF-03169] c31 N71-15675
- RECOVERY PARACHUTES**
Parachute system for lowering manned spacecraft
from post-reentry to ocean landing
[NASA-CASE-XLA-00195] c02 N70-38009
- Development and operating principles of gas
generator for deploying recovery parachutes
from space capsules during atmospheric entry
[NASA-CASE-LAR-10549-1] c31 N73-13898
- RECTANGULAR PANELS**
Rectangular solar cell stacked panels to
generate electrical power aboard spacecraft
[NASA-CASE-NPO-11771] c03 N73-20040
- Composite sandwich lattice structure
[NASA-CASE-LAR-11898-1] c24 N78-10214
- RECTIFIERS**
Lithium drifted silicon radiation detector with
gold rectifying contacts
[NASA-CASE-XLE-10529] c14 N69-23191
- Power control switching circuit using low
voltage semiconductor controlled rectifiers
for high voltage isolation
[NASA-CASE-XNP-02713] c10 N69-39888
- Precision full wave rectifier circuit for
rectifying incoming electrical signals having
positive or negative polarity with only
positive output signals
[NASA-CASE-ARC-10101-1] c09 N71-33109
- Voltage amplitude-responsive trigger circuit
with silicon controlled rectifier
[NASA-CASE-GSC-10221-1] c09 N72-23171
- Dc to ac to dc converter with transistor driven
synchronous rectifiers
[NASA-CASE-GSC-11126-1] c09 N72-25253
- Elimination of current spikes in buck power
converters
[NASA-CASE-NPO-14505-1] c33 N81-19393
- Combinational logic for generating gate drive
signals for phase control rectifiers
[NASA-CASE-MFS-25208-1] c33 N81-27402
- REDOX CELLS**
Zirconium carbide as an electrocatalyst for the
chromous/chronic redox couple
[NASA-CASE-LEW-13246-1] c25 N81-26203
- Catalyst surfaces for the chromous/chronic redox
couple
[NASA-CASE-LEW-13148-2] c44 N81-29524
- REDUCED GRAVITY**
Reduced gravity liquid configuration simulator
to study propellant behavior in rocket fuel
tanks
[NASA-CASE-XLE-02624] c12 N69-39988
- Apparatus for measuring human body mass in zero
or reduced gravity environment
[NASA-CASE-XMS-03371] c05 N70-42000
- Cable suspension and inclined walkway system for
simulating reduced or zero gravity environments
[NASA-CASE-XLA-01787] c11 N71-16028
- Development of restraint system for securing
personnel to ergometer while exercising under
weightless conditions
[NASA-CASE-MFS-21046-1] c14 N73-27377
- REDUCTION (CHEMISTRY)**
Producing metal powders of controlled particle
size by reducing oxide using reactive metal
vapor in vacuum
[NASA-CASE-XLE-06461] c17 N72-22530
- Process for making anhydrous metal halides
[NASA-CASE-LEW-11860-1] c37 N76-18458
- Curable liquid hydrocarbon prepolymers
containing hydroxyl groups and process for
producing same
[NASA-CASE-NPO-13137-1] c27 N80-32514
- REDUNDANCY**
Reconfiguring redundancy management
[NASA-CASE-MSC-18498-1] c60 N80-30050
- REDUNDANT COMPONENTS**
Redundant memory for enhanced reliability of
digital data processing system
[NASA-CASE-GSC-10564] c10 N71-29135
- Redundant disc
[NASA-CASE-LEW-12496-1] c07 N78-33101
- Redundant motor drive system
[NASA-CASE-MFS-23777-1] c37 N80-32716
- Redundant operation of counter modules
[NASA-CASE-NPO-14162-1] c60 N81-15706
- REELS**
Method and apparatus for measuring web material
wound on a reel
[NASA-CASE-GSC-11902-1] c38 N77-17495
- REENTRY COMMUNICATION**
Electrostatic modulator for communicating
through plasma sheath formed around spacecraft
during reentry
[NASA-CASE-XLA-01400] c07 N70-41331
- Method and apparatus for communicating through
ionized layer of gases surrounding spacecraft
during reentry into planetary atmospheres
[NASA-CASE-XLA-01127] c07 N70-41372
- Reentry communication by injection of water
droplets into plasma layer surrounding space
vehicle
[NASA-CASE-XLA-01552] c07 N71-11284
- REENTRY SHIELDING**
Transpirationally cooled heat ablation system
for interplanetary spacecraft reentry shielding
[NASA-CASE-XMS-02677] c31 N70-42075
- Method and apparatus for fabrication of heat
insulating and ablative reentry structure
[NASA-CASE-XMS-02009] c33 N71-20834
- Ablative heat shield for protection from
aerodynamic heating of reentry spacecraft
[NASA-CASE-MSC-12143-1] c33 N72-17947
- Protected isotope heat source --- for
atmospheric reentry protection and heat
transmission to spacecraft
[NASA-CASE-LEW-11227-1] c73 N75-30876
- Fibrous refractory composite insulation ---
shielding reusable spacecraft
[NASA-CASE-ARC-11169-1] c24 N79-24062
- Adjustable high emittance gap filler --- reentry
shielding for space shuttle vehicles
[NASA-CASE-ARC-11310-1] c27 N80-23454
- REENTRY TRAJECTORIES**
Aerodynamic configuration of reentry vehicle

heat shield to provide longitudinal and directional stability at hypersonic velocities
[NASA-CASE-XMS-04142] c31 N70-41631

REENTRY VEHICLES

Leading edge design for hypersonic reentry vehicles
[NASA-CASE-XLA-00165] c31 N70-33242
Delta winged, manned reentry vehicle capable of horizontal glide landing at low speeds
[NASA-CASE-XLA-00241] c31 N70-37986
Telespectrograph for analyzing upper atmosphere by tracking bodies reentering atmosphere at high velocities
[NASA-CASE-XLA-03273] c14 N71-18699
Ablation sensor for measuring surface ablation rate of material on vehicles entering earth's atmosphere on entry into planetary atmospheres
[NASA-CASE-XLA-01791] c14 N71-22991
Design of ring wing vehicle of high drag-to-weight ratio to withstand reentry stress into low density atmosphere
[NASA-CASE-XLA-04901] c31 N71-24315
Development of auxiliary lifting system to provide ferry capability for entry vehicles
[NASA-CASE-LAR-10574-1] c11 N73-13257
Development and operating principles of gas generator for deploying recovery parachutes from space capsules during atmospheric entry
[NASA-CASE-LAR-10549-1] c31 N73-13898
Three-component ceramic coating for silica insulation
[NASA-CASE-MSC-14270-2] c27 N76-23426

REFERENCE SYSTEMS

Automatic frequency control device for providing frequency reference for voltage controlled oscillator
[NASA-CASE-KSC-10393] c09 N72-21247
Magnetic heading reference
[NASA-CASE-LAR-11387-2] c04 N77-19056

REFINING

Helium refining by superfluidity
[NASA-CASE-XNP-00733] c06 N70-34946

REFLECTANCE

Optical characteristics measuring apparatus
[NASA-CASE-XNP-08840] c23 N71-16365
Device for determining acceleration of gravity by interferometric measurement of travel of falling body
[NASA-CASE-XNP-05844] c14 N71-17587
Highly stable optical mirror assembly optimizing image quality of light diffraction patterns
[NASA-CASE-ERC-10001] c23 N71-24868

REFLECTED WAVES

Device and method for determining X ray reflection efficiency, scattering properties, and surface finish of optical surfaces
[NASA-CASE-MFS-20243] c23 N73-13662
Clear air turbulence detector
[NASA-CASE-MFS-21244-1] c36 N75-15028
Reflected-wave maser --- low noise amplifier
[NASA-CASE-NPO-13490-1] c36 N76-31512

REFLECTING TELESCOPES

Anastigmatic three-mirror telescope
[NASA-CASE-MFS-23675-1] c89 N79-10969

REFLECTION

Vacuum preparation of zinc titanate pigment resistant to loss of reflective properties
[NASA-CASE-MFS-13532] c18 N72-17532
Method and apparatus for compensating reflection losses in a path length modulated absorption-absorption trace gas detector --- for determining density of gas
[NASA-CASE-ARC-10631-1] c74 N76-20958

REFLECTOMETERS

Ellipsoidal mirror reflector for measuring reflectance
[NASA-CASE-XGS-05291] c23 N71-16341
Real time reflectometer --- measurement of specular reflectance
[NASA-CASE-MFS-23118-1] c35 N77-31465
Coal-shale interface detection
[NASA-CASE-MFS-23720-3] c43 N79-25443
Visible and infrared polarization ratio spectrorreflectometer
[NASA-CASE-LAR-12285-1] c35 N80-28687

REFLECTORS

Method of compactly packaging centrifugally expandable lightweight flexible reflector satellite

[NASA-CASE-XLA-00138] c31 N70-37981
Antenna design with self erecting mesh reflector
[NASA-CASE-XGS-09190] c31 N71-16102
Cylindrical reflector for resolving wide angle light beam from telescope into narrow beam for spectroscopic analysis
[NASA-CASE-XGS-08269] c23 N71-26206
Conical reflector antenna with feed approximating line source
[NASA-CASE-NPO-10303] c07 N72-22127
Target acquisition antenna feed with reflector system
[NASA-CASE-GSC-10064-1] c10 N72-22235
Multipurpose microwave antenna, employing dish reflector with plural coaxial horn feeds
[NASA-CASE-NPO-11264] c07 N72-25174
Characteristics of microwave antenna with conical reflectors to generate plane wave front
[NASA-CASE-NPO-11661] c07 N73-14130
Non-tracking solar energy collector system
[NASA-CASE-NPO-13813-1] c44 N78-31526
Constant magnification optical tracking system
[NASA-CASE-NPO-14813-1] c74 N80-24152
Acoustic suspension system
[NASA-CASE-NPO-15435-1] c71 N81-27887

REFRACTIVITY

The 2 deg/90 deg laboratory scattering photometer --- particulate refractivity in hydrosols
[NASA-CASE-GSC-12088-1] c74 N78-13874
Chromatically corrected virtual image visual display --- reducing eye strain in flight simulators
[NASA-CASE-LAR-12251-1] c74 N80-27185
Dual laser optical system and method for studying fluid flow
[NASA-CASE-MFS-25315-1] c36 N81-19440

REFRACTORY MATERIALS

Test apparatus for determining mechanical properties of refractory materials at high temperatures in vacuum or inert atmospheres
[NASA-CASE-XLE-00335] c14 N70-35368
Prestressed rocket nozzle with ceramic inner rings and refractory metal outer rings
[NASA-CASE-XNP-02888] c18 N71-21068
Semiconductor device manufacture using refractory dielectrics as diffusant masks and interconnection insulating materials
[NASA-CASE-XER-08476-1] c26 N72-17820
Electric furnace for vacuum and zero gravity melting of high melting point materials during earth orbit
[NASA-CASE-MFS-20710] c11 N72-23215
High temperature resistant cermet and ceramic compositions --- for thermal resistant insulators and refractory coatings
[NASA-CASE-NPO-13690-1] c27 N78-19302
High temperature resistant cermet and ceramic compositions
[NASA-CASE-NPO-13690-2] c27 N79-14213
Fibrous refractory composite insulation --- shielding reusable spacecraft
[NASA-CASE-ARC-11169-1] c24 N79-24062
Catalytic trimerization of aromatic nitriles and triaryl-s-triazine ring cross-linked high temperature resistant polymers and copolymers made thereby
[NASA-CASE-LEW-12053-2] c27 N79-28307
Improved refractory coatings and method of producing the same
[NASA-CASE-LEW-13169-1] c26 N80-14232
Adjustable high emittance gap filler --- reentry shielding for space shuttle vehicles
[NASA-CASE-ARC-11310-1] c27 N80-23454
Castable high temperature refractory materials
[NASA-CASE-LEW-13080-1] c27 N80-29496
Improved attachment system for silica tiles --- thermal protection for space shuttle orbiter
[NASA-CASE-MSC-18741-1] c16 N81-16110
Improved refractory coatings --- sputtered coatings on substrates that form stable nitrides
[NASA-CASE-LEW-23169-2] c26 N81-16209
Apparatus for accurately preloading auger attachment means for frangible protective material
[NASA-CASE-MSC-18791-1] c37 N81-24446
Densification of porous refractory substrates --- space shuttle orbiter tiles
[NASA-CASE-MSC-18737-1] c25 N81-29180

- Method of repairing surface damage to porous refractory substrates --- shuttle orbiter tiles
[NASA-CASE-MSC-18736-1] c27 N81-29231
- REFRACTORY METALS**
- Refractory filament series circuitry for radiant heater
[NASA-CASE-XLE-00387] c33 N70-34812
- Production of refractory bodies with controlled porosity by pressing and heating mixtures of refractory and inert metal powders
[NASA-CASE-LEW-10393-1] c17 N71-15468
- Multilayer porous refractory metal ionizer design with thick, porous, large-grain substrates and thin, porous micron-grain substrates
[NASA-CASE-XNP-04338] c17 N71-23046
- Brazing alloy adapted for brazing corrosion resistant steel to refractory metals, also for brazing refractory metals to other refractory metals
[NASA-CASE-XNP-03063] c17 N71-23365
- Development and characteristics of thermal radiation shielding of refractory metal foil used for induction furnace
[NASA-CASE-XLE-03432] c33 N71-24145
- Production of high strength refractory compounds and microconstituents into refractory metal matrix
[NASA-CASE-XLE-03940] c18 N71-26153
- Silicide coating process and composition for protection of refractory metals from oxidation
[NASA-CASE-XLE-10910] c18 N71-29040
- Development of procedure for improved distribution of refractory compounds and micro-constituents in refractory metal matrix
[NASA-CASE-XLE-03940-2] c17 N72-28536
- Fused silicide coatings containing discrete particles for protecting niobium alloys --- used in space shuttle thermal protection systems and turbine engine components
[NASA-CASE-LEW-11179-1] c27 N76-16229
- Method of making an apertured casting --- using duplicate mold
[NASA-CASE-LEW-11169-1] c37 N76-23570
- REFRIGERATING**
- Heat exchanger and decontamination system for multistage refrigeration unit
[NASA-CASE-NPO-10634] c23 N72-25619
- REFRIGERATING MACHINERY**
- Gas balancing, cryogenic refrigeration apparatus with Joule-Thomson valve assembly
[NASA-CASE-NPO-10309] c15 N69-23190
- Method and apparatus for producing very low temperature refrigeration based on gas pressure balance
[NASA-CASE-XNP-08877] c15 N71-23025
- Dual solid cryogenics for spacecraft refrigeration insuring low temperature cooling for extended periods
[NASA-CASE-GSC-10188-1] c23 N71-24725
- Stirling cycle engine and refrigeration systems
[NASA-CASE-NPO-13613-1] c37 N76-29590
- A cycling Joule Thomson refrigerator
[NASA-CASE-NPO-15251-1] c31 N81-19344
- REFRIGERATORS**
- Intermittent type silica gel adsorption refrigerator for providing temperature control for spacecraft components
[NASA-CASE-XNP-00920] c15 N71-15906
- Helium refrigerator
[NASA-CASE-NPO-13435-1] c31 N76-14284
- Thermal compensator for closed-cycle helium refrigerator --- assuring constant temperature for an infrared laser diode
[NASA-CASE-GSC-12168-1] c31 N79-17029
- Refrigerator module, system and process --- regenerative, cryogenic cooling of an infrared radiation detection system
[NASA-CASE-ARC-11263-1] c31 N81-27328
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[NASA-CASE-XNP-02654] c10 N70-42032
- Direct current electromotive system for regenerative braking of electric motor
[NASA-CASE-XNP-01096] c10 N71-16030
- Free-piston regenerative hot gas hydraulic engine
[NASA-CASE-LEW-12274-1] c37 N80-31790
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- An implantable electrical device
[NASA-CASE-GSC-12560-1] c52 N80-27073
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- Metal ribbon wrapped outer wall for regeneratively cooled combustion chamber
[NASA-CASE-XLE-00164] c15 N70-36411
- Fabrication method for lightweight regeneratively cooled combustion chamber of channel construction
[NASA-CASE-XLE-00150] c28 N70-41818
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[NASA-CASE-XLE-00685] c28 N70-41992
- Regenerative cooling system for rocket combustion chamber using coolant tubes in convergent-divergent nozzle
[NASA-CASE-XLE-04857] c28 N71-23968
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[NASA-CASE-XLE-05230-2] c14 N73-13417
- Refrigerator module, system and process --- regenerative, cryogenic cooling of an infrared radiation detection system
[NASA-CASE-ARC-11263-1] c31 N81-27328
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- Loop transponder for regenerating code of mu-type ranging system
[NASA-CASE-NPO-11707] c07 N73-25161
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[NASA-CASE-GSC-10186] c08 N71-33110
- Priority interrupt system --- comprised of four registers
[NASA-CASE-NPO-13067-1] c60 N76-18800
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- Process for developing filament reinforced plastic tubes used in research and development programs
[NASA-CASE-LAR-10203-1] c15 N72-16330
- Reinforced structural plastics
[NASA-CASE-LEW-10199-1] c27 N74-23125
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- Reinforcing beam system for highly flexible diaphragms in valves or pressure switches
[NASA-CASE-XNP-01962] c32 N70-41370
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[NASA-CASE-XLE-02428] c17 N70-33288
- Method for producing fiber reinforced metallic composites with high strength and elasticity over wide temperature range
[NASA-CASE-XLE-00231] c17 N70-38198
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[NASA-CASE-XLE-03925] c18 N71-22894
- Production and application of sprayable fiber reinforced ablation material
[NASA-CASE-XLA-04251] c18 N71-26100
- Method of preparing graphite reinforced aluminum composite
[NASA-CASE-MFS-21077-1] c24 N75-28135
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[NASA-CASE-LAR-11688-1] c05 N78-18045
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[NASA-CASE-XPR-00929] c31 N70-34566
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[NASA-CASE-MSC-90153-2] c05 N72-25120
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[NASA-CASE-XLA-08254] c14 N71-26161
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[NASA-CASE-XLA-01262] c15 N71-21404
- Covered silicon solar cells and method of manufacture --- with polymeric films
[NASA-CASE-LBW-11065-2] c44 N76-14600
- Method of manufacture of bonded fiber flywheel --- fiberglass-epoxy
[NASA-CASE-MFS-23674-1] c24 N81-29163
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[NASA-CASE-ARC-10098-1] c06 N71-24739
- Development of process for bonding resinous body in cavities of honeycomb structures
[NASA-CASE-MSC-12357] c15 N73-12489
- Resin for protecting p-n semiconductor junction surface
[NASA-CASE-ERC-10339-1] c18 N73-30532
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[NASA-CASE-LAR-12019-1] c24 N78-17150
- Resin composition, process for producing the same, product produced therefrom and process for producing said product
[NASA-CASE-ARC-11331-1] c27 N81-31363
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[NASA-CASE-MSC-90153-2] c05 N72-25120
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[NASA-CASE-KSC-10723-1] c37 N75-13265
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[NASA-CASE-XLE-01783] c28 N70-34175
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[NASA-CASE-NPO-13081-1] c33 N74-22814
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[NASA-CASE-HQN-10876-1] c33 N76-27473
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Conversion system for increasing resolution of analog to digital converters
[NASA-CASE-XAC-00404] c08 N70-40125
- Cylindrical reflector for resolving wide angle light beam from telescope into narrow beam for spectroscopic analysis
[NASA-CASE-XGS-08269] c23 N71-26206
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[NASA-CASE-NPO-14134-1] c71 N79-23753
- RESOLVERS**
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[NASA-CASE-MSC-14066-1] c33 N74-27705
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[NASA-CASE-ARC-10639-1] c35 N78-13400
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[NASA-CASE-NPO-15201-1] c36 N81-24426
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[NASA-CASE-XAC-02807] c09 N71-23021
- Quantitative liquid measurements in container by resonant frequencies
[NASA-CASE-XNP-02500] c18 N71-27397
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[NASA-CASE-ERC-10403-1] c10 N73-26228
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[NASA-CASE-LAR-12016-1] c39 N78-15512
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[NASA-CASE-MSC-11242] c35 N78-17356
- Method and apparatus for shaping and enhancing acoustical levitation forces
[NASA-CASE-MFS-25050-1] c71 N81-15767
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[NASA-CASE-GSC-10990-1] c09 N73-26195
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[NASA-CASE-IFR-08403] c05 N71-11202
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[NASA-CASE-FRC-10012] c14 N72-17329

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[NASA-CASE-PRC-10022] c12 N71-26546

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[NASA-CASE-MSC-13436-1] c05 N73-32015

Metabolic analyzer --- for measuring metabolic rate and breathing dynamics of human beings
[NASA-CASE-MFS-21415-1] c52 N74-20728

RESPIROMETERS
Metabolic analyzer --- for measuring metabolic rate and breathing dynamics of human beings
[NASA-CASE-MFS-21415-1] c52 N74-20728

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[NASA-CASE-KSC-10521] c07 N73-20176

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Collapsible auxiliary tank for restarting liquid propellant rocket motors under zero gravity
[NASA-CASE-XNP-01390] c28 N70-41275

Regenerative cooling system for small rocket engine having restart capability and using noncryogenic hypergolic propellants
[NASA-CASE-XLE-00685] c28 N70-41992

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[NASA-CASE-XMS-01115] c05 N70-39522

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[NASA-CASE-MSC-16938-1] c37 N80-23653

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[NASA-CASE-LAR-12361-1] c37 N81-12422

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[NASA-CASE-XLE-05913] c33 N71-14032

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[NASA-CASE-XGS-05715] c23 N71-16100

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[NASA-CASE-GSC-11188-2] c21 N73-19630

Production method of star tracking reticles for transmitting in visible and near ultraviolet regions
[NASA-CASE-GSC-11188-1] c14 N73-32320

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[NASA-CASE-GSC-11188-3] c74 N74-20008

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[NASA-CASE-GSC-11569-1] c89 N74-30886

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[NASA-CASE-XLA-00119] c11 N70-33329

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[NASA-CASE-XMF-07587] c15 N71-18701

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[NASA-CASE-MFS-23646-1] c37 N79-22474

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[NASA-CASE-GSC-12331-1] c18 N80-14183

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[NASA-CASE-MFS-25403-1] c18 N81-24164

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[NASA-CASE-XMS-12158-1] c31 N69-27499

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[NASA-CASE-XMS-03792] c14 N70-41612

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[NASA-CASE-NPO-10300] c14 N71-17662

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[NASA-CASE-NPO-13999-1] c35 N78-18395

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[NASA-CASE-NPO-14524-1] c32 N80-24510

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[NASA-CASE-NPO-14448-1] c74 N81-29963

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[NASA-CASE-XNF-01973] c31 N70-41588

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[NASA-CASE-MSC-12433] c31 N73-14854

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[NASA-CASE-ARC-10721-1] c27 N76-22376

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Reverse osmosis membrane of high urea rejection properties --- water purification
[NASA-CASE-ARC-10980-1] c27 N80-23452

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[NASA-CASE-XLE-00170] c15 N70-36412

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[NASA-CASE-XLA-09371] c10 N71-18724

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[NASA-CASE-XMS-09310] c15 N71-22706

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[NASA-CASE-LEW-12760-1] c07 N77-17059

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[NASA-CASE-MFS-20509] c11 N72-17183

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[NASA-CASE-ARC-10755-2] c34 N76-27517

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[NASA-CASE-LEW-12050-1] c35 N77-32454

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[NASA-CASE-NFO-14501-1] c35 N80-18357

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[NASA-CASE-XLE-00164] c15 N70-36411

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[NASA-CASE-XLA-05966] c15 N72-12408

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[NASA-CASE-NFO-13652-1] c44 N79-17314

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[NASA-CASE-NFO-13652-2] c44 N79-24431

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[NASA-CASE-NPO-14298-1] c76 N80-32244

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[NASA-CASE-NPO-14295-1] c76 N80-32245

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[NASA-CASE-NPO-14297-1] c33 N81-19389

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[NASA-CASE-GSC-10565-1] c06 N72-25149

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[NASA-CASE-XLA-06095] c01 N69-39581

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[NASA-CASE-MSC-13540-1] c05 N72-33096

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Ride quality meter
[NASA-CASE-LAR-12882-1] c54 N81-31848

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Hingeless helicopter rotor with improved stability
[NASA-CASE-ARC-10807-1] c05 N77-17029

RIGID STRUCTURES

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[NASA-CASE-XMS-10660-1] c15 N71-25575

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[NASA-CASE-LAR-10373-1] c18 N71-26155

Adjustable rigid mount for trihedral mirror formed of alloy with small coefficient of thermal expansion supporting screws and spring-biased plates
[NASA-CASE-XNP-08907] c23 N71-29123

Folding structure fabricated of rigid panels
[NASA-CASE-XHQ-02146] c18 N75-27040

Telescoping columns --- parabolic antenna support
[NASA-CASE-LAR-12195-1] c31 N81-27324

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[NASA-CASE-XLA-01220] c02 N70-41863

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[NASA-CASE-LAR-12052-1] c18 N81-29152

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Design of transistorized ring counter circuit with special steering and triggering circuits
[NASA-CASE-XGS-03095] c09 N69-27463

RING STRUCTURES

Reversible ring counter using cascaded single silicon controlled rectifier stages
[NASA-CASE-XGS-01473] c09 N71-10673

Nonreusable energy absorbing device comprising ring member with plurality of recesses, cutting members, and guide member mounted in each recess
[NASA-CASE-XMF-10040] c15 N71-22877

Phase-locked servo system --- for synchronizing the rotation of slip ring assembly
[NASA-CASE-MFS-22073-1] c33 N75-13139

Laser system with an antiresonant optical ring
[NASA-CASE-HQN-10844-1] c36 N75-19653

Helmet latching and attaching ring
[NASA-CASE-XMS-04670] c54 N78-17678

Liquid metal slip ring
[NASA-CASE-LEW-12277-2] c33 N78-25323

Collapsible corrugated horn antenna
[NASA-CASE-LAR-11745-1] c32 N80-29539

Modified spiral wound retaining ring
[NASA-CASE-LAR-12361-1] c37 N81-12422

Ladder supported ring bar circuit
[NASA-CASE-LEW-13570-1] c33 N81-24348

RING WINGS

Design of ring wing vehicle of high drag-to-weight ratio to withstand reentry stress into low density atmosphere
[NASA-CASE-XLA-04901] c31 N71-24315

RIPPLES

Circuit for monitoring power supply by ripple current indication
[NASA-CASE-KSC-10162] c09 N72-11225

RIVETS

Electrical connection for printed circuits on common board, using bellows principle in rivet
[NASA-CASE-XNP-05082] c15 N70-41960

ROCKET ENGINE CASES

Method for shaping regeneratively cooled rocket motor casing having minimum thickness at each channel cross section
[NASA-CASE-XLE-00409] c28 N71-15658

Regeneratively cooled rocket motor casing with tapered channels to insure minimum thicknesses at each channel cross section for necessary strength requirements

[NASA-CASE-XLE-05689] c28 N71-15659
Payload/spent rocket engine case separation system

[NASA-CASE-XLA-05369] c31 N71-15687
Liner for hybrid solid propellants to bind

propellant to rocket motor case
[NASA-CASE-XNP-09744] c27 N71-16392

Permanently magnetized ion engine casing construction for use in spacecraft propulsion systems
[NASA-CASE-XNP-06942] c28 N71-23293

Casting propellant in rocket engine
[NASA-CASE-LAR-11995-1] c28 N77-10213

Solid propellant rocket motor and method of making same
[NASA-CASE-XLA-1349] c20 N77-17143

ROCKET ENGINE CONTROL

Fluid thrust control system --- for liquid propellant rocket engines
[NASA-CASE-IMP-05964-1] c20 N79-21124

ROCKET ENGINE DESIGN

High thrust annular liquid propellant rocket engine and exhaust nozzle design
[NASA-CASE-XLE-00078] c28 N70-33284

Spherical solid propellant rocket engine design
[NASA-CASE-XLA-00105] c28 N70-33331

Spherical solid propellant rocket engine having abrupt burnout
[NASA-CASE-XHQ-01897] c28 N70-35381

Metal ion rocket engine design
[NASA-CASE-XLE-00342] c28 N70-37980

Improvement in rocket engine performance with swirling flow exhaust nozzle development
[NASA-CASE-XNP-03692] c28 N71-24321

Characteristics of ion rocket engine with combination keeper electrode and electron baffle
[NASA-CASE-NPO-11880] c28 N73-24783

Supersonic-combustion rocket
[NASA-CASE-LEW-11058-1] c20 N74-13502

Rocket chamber and method of making
[NASA-CASE-LEW-11118-2] c20 N76-14191

System for imposing directional stability on a rocket-propelled vehicle
[NASA-CASE-MFS-21311-1] c20 N76-21275

Low thrust monopropellant engine --- low temperature environments
[NASA-CASE-GSC-12194-2] c20 N79-15151

ROCKET ENGINES

Channel-type shell construction for rocket engines and related configurations
[NASA-CASE-XLE-00144] c28 N70-34860

Encapsulated heater forming hollow body for cathode used in ion thruster
[NASA-CASE-LEW-10814-1] c28 N70-35422

Apparatus for cooling and injecting hypergolic propellants into combustion chamber of small rocket engine
[NASA-CASE-XLE-00303] c15 N70-36535

Elastic universal joint for rocket motor mounting
[NASA-CASE-XNP-00416] c15 N70-36947

Water electrolysis rocket engine with self-regulating stoichiometric fuel mixing regulator
[NASA-CASE-XGS-08729] c28 N71-14044

Method for igniting solid propellant rocket motors by injecting hypergolic fluids
[NASA-CASE-XLE-01988] c27 N71-15634

Laminar flow of liquid coolants in rocket engines
[NASA-CASE-NPO-10122] c12 N71-17631

Improvement in rocket engine performance with swirling flow exhaust nozzle development
[NASA-CASE-XNP-03692] c28 N71-24321

System for removing and repairing spacecraft control thrusters by use of portable air locks
[NASA-CASE-MFS-20325] c28 N71-27095

Device for back purging thrust engines
[NASA-CASE-XMS-04826] c28 N71-28849

Development of method for cooling high temperature wall members with cooling medium having high heat absorption capability
[NASA-CASE-HQN-00938] c33 N71-29053

Automatic shunting of ion thruster magnetic field when thruster is not operating
[NASA-CASE-LEW-10835-1] c28 N72-22771

Vacuum chamber with scale model of rocket engine base area of space vehicle
[NASA-CASE-MFS-20620] c11 N72-27262

Thermocouple apparatus for measuring wall temperatures in regeneratively cooled rocket engines having thin walled cooling passages
[NASA-CASE-XLE-05230-2] c14 N73-13417

Improving performance of magnetoplasmadynamic arc rocket engine
[NASA-CASE-LEW-11180-1] c25 N73-25760

Method of electroforming a rocket chamber
[NASA-CASE-LEW-11118-1] c20 N74-32519

Device for installing rocket engines
[NASA-CASE-MFS-19220-1] c20 N76-22296

Ion beam thruster shield
[NASA-CASE-LEW-12082-1] c20 N77-10148

Anode for ion thruster
[NASA-CASE-LEW-12048-1] c20 N77-20162

General purpose rocket furnace
[NASA-CASE-MFS-23460-1] c12 N79-26075

ROCKET EXHAUST

Thrust vector control by secondary injection of fluid into rocket nozzle flow field to separate exhaust flow
[NASA-CASE-XLE-00208] c28 N70-34294

Development of vortex fluid amplifier for throttling rocket exhaust
[NASA-CASE-LEW-10374-1] c28 N73-13773

ROCKET FIRING

Design and characteristics of linkage to alleviate rocket vehicle divergence during launch
[NASA-CASE-XLA-00256] c31 N71-15663

ROCKET FLIGHT

Development of technique for control of free flight rocket vehicles
[NASA-CASE-XLA-00937] c31 N71-17691

ROCKET LAUNCHING

Design and characteristics of linkage to alleviate rocket vehicle divergence during launch
[NASA-CASE-XLA-00256] c31 N71-15663

Controlled release device for use in launching rockets or missiles
[NASA-CASE-XKS-03338] c15 N71-24043

ROCKET LININGS

Heat exchanger and method of making --- rocket lining
[NASA-CASE-LEW-12441-2] c34 N80-24573

ROCKET NOZZLES

Gimbaled partially submerged nozzle for solid propellant rocket engines for providing directional control
[NASA-CASE-XNP-01544] c28 N70-34162

Large area-ratio nozzles for rocket motor thrust chambers
[NASA-CASE-XLE-00145] c28 N70-36806

Flexible rocket motor nozzle closure device to aid ignition and protect rocket chamber from foreign objects
[NASA-CASE-XLA-02651] c28 N70-41567

Automatically deploying nozzle exit cone extension
[NASA-CASE-XLE-01640] c31 N71-15637

Method for testing rocket nozzles at high tensile stress levels
[NASA-CASE-NPO-10311] c31 N71-15643

Development of collapsible nozzle extension for rocket engines
[NASA-CASE-MFS-11497] c28 N71-16224

Camera protecting device for use in photographing rocket engine nozzles or other engine components
[NASA-CASE-NPO-10174] c14 N71-18465

Multislot film cooled pyrolytic graphite rocket nozzle
[NASA-CASE-XNP-04389] c28 N71-20942

Prestressed rocket nozzle with ceramic inner rings and refractory metal outer rings
[NASA-CASE-XNP-02888] c18 N71-21068

Improvement in rocket engine performance with swirling flow exhaust nozzle development
[NASA-CASE-XNP-03692] c28 N71-24321

Development of method for cooling high temperature wall members with cooling medium having high heat absorption capability
[NASA-CASE-HQN-00938] c33 N71-29053

Inflatable rocket engine nozzle skirt with transpiration cooling
[NASA-CASE-MFS-20619] c28 N72-11708

Thin walled nozzle with insulative nonablative coating for solid propellant rocket engines
[NASA-CASE-NPO-11458] c28 N72-23810

Method of making a rocket nozzle
[NASA-CASE-XNP-06884-1] c20 N79-21123

Retractable environmental seal
[NASA-CASE-MFS-23646-1] c37 N79-22474

ROCKET OXIDIZERS

Preparing oxidizer coated metal fuel particles
[NASA-CASE-NFO-11975-1] c28 N74-33209

A system for concurrently delivering a stream of powdered fuel and a stream of powdered oxidizer to a combustion chamber for a reaction motor
[NASA-CASE-MFS-23904-1] c20 N79-13077

ROCKET PROPELLANTS

Solenoid two-step valve for bipropellant flow rate control to rocket engine
[NASA-CASE-XMS-04890-1] c15 N70-22192

Rocket engine injector orifice to accommodate changes in density, velocity, and pressure, thereby maintaining constant mass flow rate of propellant into rocket combustion chamber
[NASA-CASE-XLE-03157] c28 N71-24736

Bipropellant injector with pair of concave deflector plates
[NASA-CASE-XNP-09461] c28 N72-23809

ROCKET TEST FACILITIES

High-vacuum condenser tank for testing ion rocket engines
[NASA-CASE-XLE-00168] c11 N70-33278

Micro-pound extended range thrust stand for small rocket engines
[NASA-CASE-GSC-10710-1] c28 N71-27094

ROCKET THRUST

Solid propellant rocket vehicle thrust control method and apparatus
[NASA-CASE-XNP-00217] c28 N70-38181

High voltage insulators for direct current in acceleration system of electrostatic thruster
[NASA-CASE-XLE-01902] c28 N71-10574

Characteristics of solid propellant rocket engine with controlled rate of thrust buildup operating in vacuum environment
[NASA-CASE-NFO-11559] c28 N73-24784

Thrust measurement
[NASA-CASE-XMS-05731] c35 N75-29382

ROCKET VEHICLES

Umbilical separator for rockets
[NASA-CASE-XNP-00425] c11 N70-38202

Hydraulic support equipment for full scale dynamic testing of large rocket vehicle under free flight conditions
[NASA-CASE-XNP-01772] c11 N70-41677

Design and characteristics of linkage to alleviate rocket vehicle divergence during launch
[NASA-CASE-XLA-00256] c31 N71-15663

Development of technique for control of free flight rocket vehicles
[NASA-CASE-XLA-00937] c31 N71-17691

Coupling device for moving vehicles
[NASA-CASE-GSC-12322-1] c37 N80-14398

ROCKET-BORNE INSTRUMENTS

Rocket-borne aspect sensor consisting of radiation sensor, apertured disk, commutator, and counting circuits
[NASA-CASE-XGS-08266] c14 N69-27432

ROCKETS

Device for detecting hydrogen fires onboard high altitude rockets
[NASA-CASE-MFS-13130] c10 N72-17173

ROCKS

Rotary impact-type rock drill for recovering rock cuttings
[NASA-CASE-XNP-07478] c14 N69-21923

Rock sampling --- apparatus for controlling particle size
[NASA-CASE-XNP-10007-1] c46 N74-23068

Rock sampling --- method for controlling particle size distribution
[NASA-CASE-XNP-09755] c46 N74-23069

Coal-rock interface detector
[NASA-CASE-MFS-23725-1] c43 N79-31706

RODS

Nuclear thermionic converter --- tungsten-thorium oxide rods
[NASA-CASE-NPO-13121-1] c73 N77-18891

ROLL

Measuring roll alignment of test body with respect to reference body
[NASA-CASE-GSC-10514-1] c14 N72-20379

ROLLER BEARINGS

Solid lubricant applied to porous roller bearings prior to use in ultrahigh vacuum
[NASA-CASE-XLE-09527] c15 N71-17688

- Semilinear bearing comprising two rows of roller bearings separated by spherical bearings and permitting rotational and translational movement
[NASA-CASE-XLA-02809] c15 N71-22982
- Low mass rolling element bearing assembly
[NASA-CASE-LEW-11087-1] c15 N73-30458
- Method of making rolling element bearings
[NASA-CASE-LEW-11087-2] c37 N74-15128
- Bearing material --- composite material with low friction surface for rolling or sliding contact
[NASA-CASE-LEW-11930-1] c24 N76-22309
- ROLLERS**
- Improving load capacity and fatigue life of rolling element systems in rockets and missiles
[NASA-CASE-XLE-02999] c15 N71-16052
- Load regulating latch
[NASA-CASE-MS-C-19535-1] c37 N77-32499
- An improved suspension system for a wheel rolling on a flat track --- bearings for directional antennas
[NASA-CASE-NPO-14395-1] c37 N79-12446
- ROLLING CONTACT LOADS**
- Development of rolling element bearing for operation in ultrahigh vacuum environment
[NASA-CASE-XLE-09527-2] c15 N71-26189
- ROLLING MOMENTS**
- Star sensor system for roll attitude control of spacecraft
[NASA-CASE-XNP-01307] c21 N70-41856
- ROOM TEMPERATURE**
- Process permitting application of synthetic resin coating to irregular-shaped objects at ambient temperature
[NASA-CASE-XNP-06508] c18 N69-39895
- ROTARY STABILITY**
- Drive mechanism for operating reactance attitude control system for aerospace bodies
[NASA-CASE-XNP-01598] c21 N71-15583
- Combination guide and rotary bearing for freely moving shaft
[NASA-CASE-XLA-00013] c15 N71-29136
- Lubricated journal bearing
[NASA-CASE-LEW-11076-3] c37 N75-30562
- Cyclical bi-directional rotary actuator
[NASA-CASE-GSC-11883-1] c37 N77-19458
- Apparatus for and method of compensating dynamic unbalance
[NASA-CASE-GSC-12550-1] c37 N81-22358
- ROTARY WING AIRCRAFT**
- Aircraft control system for rotary wing aircraft
[NASA-CASE-ERC-10439] c02 N73-19004
- ROTARY WINGS**
- Variable geometry rotor system for direct control over wake vortex
[NASA-CASE-LAR-10557] c02 N72-11018
- Hingeless helicopter rotor with improved stability
[NASA-CASE-ARC-10807-1] c05 N77-17029
- Locking redundant link
[NASA-CASE-LAR-11900-1] c37 N79-14382
- Helicopter rotor airfoil
[NASA-CASE-LAR-12396-1] c02 N79-24558
- Acoustically swept rotor --- helicopter noise reduction
[NASA-CASE-ARC-11106-1] c05 N80-14107
- Compensating linkage for main rotor control
[NASA-CASE-LAR-11797-1] c05 N81-19C87
- ROTATING BODIES**
- Optical scanner mounted on rotating support structure with method of compensating for image or satellite rotation
[NASA-CASE-XGS-02401] c14 N69-27485
- Laser device for removing material from rotating object for dynamic balancing
[NASA-CASE-MPS-11279] c16 N71-20400
- Phase-locked servo system --- for synchronizing the rotation of slip ring assembly
[NASA-CASE-MPS-22073-1] c33 N75-13139
- Annular momentum control device used for stabilization of space vehicles and the like
[NASA-CASE-LAR-11051-1] c15 N76-14158
- Axially and radially controllable magnetic bearing
[NASA-CASE-GSC-11551-1] c37 N76-18459
- Multiple in-line docking capability for rotating space stations
[NASA-CASE-MPS-20855-1] c15 N77-10112
- Rotatable mass for a flywheel
[NASA-CASE-MPS-23051-1] c37 N79-10422
- Acoustic driving of rotor
[NASA-CASE-NPO-14005-1] c71 N79-20627
- Rotary target V-block --- aligning wind tunnel apparatus for optical measurement
[NASA-CASE-LAR-12007-2] c74 N79-25876
- Multi-channel rotating optical interface for data transmission
[NASA-CASE-NFO-14066-1] c74 N79-34011
- Rhomboid prism pair for rotating the plane of parallel light beams --- laser velocimeters
[NASA-CASE-ARC-11311-1] c74 N81-16882
- Apparatus for and method of compensating dynamic unbalance
[NASA-CASE-GSC-12550-1] c37 N81-22358
- ROTATING CYLINDERS**
- Tread drum for animals --- having an electrical shock station
[NASA-CASE-ARC-10917-1] c51 N78-27733
- Head for high speed spinner having a vacuum chuck --- holding silicon dioxide chips for etching
[NASA-CASE-NFO-15227-1] c37 N81-33482
- ROTATING DISKS**
- Foil seal between parts moving relative to each other
[NASA-CASE-XLE-05130] c15 N69-21362
- Rocket-borne aspect sensor consisting of radiation sensor, apertured disk, commutator, and counting circuits
[NASA-CASE-XGS-08266] c14 N69-27432
- Redundant disc
[NASA-CASE-LEW-12496-1] c07 N78-33101
- ROTATING ELECTRICAL MACHINES**
- Modulating and controlling intensity of light beam from high temperature source by servocontrolled rotating cylinders
[NASA-CASE-XMS-04300] c09 N71-19479
- Design and development of electric motor with stationary field and armature windings which operates on direct current
[NASA-CASE-XGS-05290] c09 N71-25999
- Double-induction variable speed system for constant-frequency electrical power generation
[NASA-CASE-ERC-10065] c09 N71-27364
- ROTATING ENVIRONMENTS**
- Radial module manned space station with artificial gravity environment
[NASA-CASE-XMS-01906] c31 N70-41373
- Artificial gravity system for simulating self-locomotion capability of astronauts in rotating environments
[NASA-CASE-XLA-03127] c11 N71-10776
- ROTATING GENERATORS**
- Rotating raster generator
[NASA-CASE-FRC-10071-1] c32 N74-20813
- Wind wheel electric power generator
[NASA-CASE-MPS-23515-1] c44 N80-21828
- Wingtip vortex turbine
[NASA-CASE-LAR-12544-1] c07 N81-27096
- ROTATING MIRRORS**
- Optical retrodirective modulator with focus spoiling reflector driven by modulation signal
[NASA-CASE-GSC-10062] c14 N71-15605
- Attitude sensor with scanning mirrors for detecting orientation of space vehicle with respect to planet
[NASA-CASE-XLA-00793] c21 N71-22880
- Optical device containing rotatable prism and reflecting mirror for generating precise angles
[NASA-CASE-XGS-04173] c19 N71-26674
- Method and apparatus for optically monitoring the angular position of a rotating mirror
[NASA-CASE-GSC-11353-1] c74 N74-21304
- ROTATING SHAFTS**
- Fluid seal formed by flexible disk on rotating shaft to retain lubricating oils around shaft
[NASA-CASE-XLE-05130-2] c15 N71-19570
- Anemometer with braking mechanism to prevent rotation of wind driven elements
[NASA-CASE-XNP-05224] c14 N71-23726
- Electromagnetic braking arrangement for controlling rotor rotation in electric motor
[NASA-CASE-XNP-06936] c15 N71-24695
- Liquid-vapor interface seal design for turbine rotating shafts including helical and molecular pumps and liquid cooling of mercury vapor
[NASA-CASE-INP-02862-1] c15 N71-26294
- Combination guide and rotary bearing for freely moving shaft
[NASA-CASE-XLA-00013] c15 N71-29136

Development of Hall effect transducer for converting mechanical shaft rotations into proportional electrical signals
[NASA-CASE-LAR-10620-1] c09 N72-25255

Spiral groove seal --- for rotating shaft
[NASA-CASE-XLB-10326-4] c37 N74-15125

Digital servo controller --- for rotating antenna shaft
[NASA-CASE-KSC-10769-1] c33 N74-29556

Solid medium thermal engine
[NASA-CASE-ARC-10461-1] c44 N74-33379

Ergometer calibrator --- for any ergometer utilizing rotating shaft
[NASA-CASE-MFS-21045-1] c35 N75-15932

Fluid seal for rotating shafts
[NASA-CASE-LEW-11676-1] c37 N76-22541

Cyclical bi-directional rotary actuator
[NASA-CASE-GSC-11883-1] c37 N77-19458

Tachometer
[NASA-CASE-MFS-23175-1] c35 N77-30436

Rotary leveling base platform
[NASA-CASE-ARC-10981-1] c37 N78-27425

Rotary electric device
[NASA-CASE-GSC-12138-1] c33 N79-20314

Circumferential shaft seal
[NASA-CASE-LEW-12119-1] c37 N80-28711

Multiple plate hydrostatic viscous damper
[NASA-CASE-LEW-12445-1] c37 N81-22360

ROTATION

Semilinear bearing comprising two rows of roller bearings separated by spherical bearings and permitting rotational and translational movement
[NASA-CASE-XLA-02809] c15 N71-22982

Mechanical actuator wherein linear motion changes to rotational motion
[NASA-CASE-XGS-04548] c15 N71-24045

Positioning mechanism for converting translatory motion into rotary motion
[NASA-CASE-NPO-10679] c15 N72-21462

ROTOR AERODYNAMICS

Acoustically swept rotor --- helicopter noise reduction
[NASA-CASE-ARC-11106-1] c05 N80-14107

ROTOR BLADES

Non-destructive method for applying and removing instrumentation on helicopter rotor blades
[NASA-CASE-LAR-11201-1] c35 N78-24515

Apparatus and method for reducing thermal stress in a turbine rotor
[NASA-CASE-LEW-12232-1] c07 N79-10057

ROTOR BLADES (TURBOMACHINERY)

Locking device for retaining turbine rotor blades on turbine wheel
[NASA-CASE-XNP-00816] c28 N71-28528

Blade vibration damping pins for turbomachinery
[NASA-CASE-XLB-00155] c28 N71-29154

Apparatus for welding blades to rotors
[NASA-CASE-LEW-10533-2] c37 N74-11300

Supersonic fan blading --- noise reduction in turbopfan engines
[NASA-CASE-LEW-11402-1] c07 N74-28226

Blade retainer assembly
[NASA-CASE-LEW-12608-1] c07 N77-27116

Platform for a swing root turbomachinery blade
[NASA-CASE-LEW-12312-1] c07 N77-32148

Helicopter rotor airfoil
[NASA-CASE-LAR-12396-1] c02 N79-24558

ROTOR LIFT

Constant lift rotor for a heavier than air craft
[NASA-CASE-ARC-11045-1] c05 N79-17847

ROTOR SPEED

Brushless dc tachometer design with Hall effect crystals and output voltage magnitude proportional to rotor speed
[NASA-CASE-MFS-20385] c09 N71-24904

Improved method for driving two-phase turbines with enhanced efficiency
[NASA-CASE-NPO-15037-1] c37 N80-26660

ROTORCRAFT AIRCRAFT

Constant lift rotor for a heavier than air craft
[NASA-CASE-ARC-11045-1] c05 N79-17847

ROTOES

Multistage, multiple reentry, single rotor, axial flow turbine
[NASA-CASE-XLB-00085] c28 N70-39895

Describing angular position and velocity sensing apparatus
[NASA-CASE-XGS-05680] c14 N71-17585

Microwave waveguide switch with rotor position control
[NASA-CASE-XNP-06507] c09 N71-23548

Electromagnetic braking arrangement for controlling rotor rotation in electric motor
[NASA-CASE-XNP-06936] c15 N71-24695

Rotary vane attenuator with two stators and intermediary rotor, using resistive and orthogonally disposed cards
[NASA-CASE-NPO-11418-1] c14 N73-13420

Process for welding compressor and turbine blades to rotors and discs of jet engines
[NASA-CASE-LEW-10533-1] c15 N73-28515

Liquid metal slip ring
[NASA-CASE-LEW-12277-2] c33 N78-25323

Magnetic field control --- electromechanical torquing devices
[NASA-CASE-MFS-23828-1] c33 N80-17359

RUBBER

Thermoplastic rubber comprising ethylene-vinyl acetate copolymer, asphalt and fluxing oil
[NASA-CASE-NPO-08835-1] c27 N78-33228

Formulated plastic separators for soluble electrode cells --- rubber-ion transport membranes
[NASA-CASE-LEW-12358-1] c44 N79-17313

Enhancement of in vitro Guayule propagation
[NASA-CASE-NPO-15213-1] c51 N81-29728

RUBBER COATINGS

Intumescent paint containing nitrile rubber for fire protection
[NASA-CASE-ARC-10196-1] c18 N73-13562

RUBY

Bonding of sapphire to sapphire by eutectic mixture of aluminum oxide and zirconium oxide
[NASA-CASE-GSC-11577-1] c37 N75-15992

Bonding of sapphire to sapphire by eutectic mixture of aluminum oxide and zirconium oxide
[NASA-CASE-GSC-11577-3] c24 N79-25143

RUBY LASERS

Cooling and radiation protection of ruby lasers using copper sulfate solution in alcohol
[NASA-CASE-MFS-20180] c16 N72-12440

Method of and apparatus for double-exposure holographic interferometry
[NASA-CASE-MFS-25405-1] c35 N81-27459

RUNWAY ALIGNMENT

Magnetic method for detection of aircraft position relative to runway
[NASA-CASE-ARC-10179-1] c21 N72-22619

RUNWAY LIGHTS

Retractable runway lights
[NASA-CASE-XLA-00119] c11 N70-33329

Spectrally balanced chromatic landing approach lighting system
[NASA-CASE-ARC-10990-1] c04 N77-12031

RUNWAYS

Environmental fog/rain visual display system for aircraft simulators
[NASA-CASE-ARC-11158-1] c09 N79-33220

RUPTURING

Knife structure for controlling rupture of shock tube diaphragms
[NASA-CASE-XAC-00731] c11 N71-15960

RYDBERG SERIES

A low energy electron magnetometer
[NASA-CASE-LAR-12706-1] c35 N81-19428

S

SABOT PROJECTILES

Hypervelocity gun --- using both electric and chemical energy for projectile propulsion
[NASA-CASE-XLE-03186-1] c09 N79-21084

SAFETY DEVICES

Helmet and torso tiedown mechanism for shortening pressure suits upon inflation
[NASA-CASE-IMS-00784] c05 N71-12335

Positive locking check valve for stopping reversed flow
[NASA-CASE-IMS-09310] c15 N71-22706

Description of protective device for providing safe operating conditions around work piece in machine or metal working tool
[NASA-CASE-XLE-01092] c15 N71-22797

Velocity limiting safety system for motor driven research vehicle
[NASA-CASE-XLA-07473] c15 N71-24895

- Device for generating and controlling combustion products for testing of fire detection system
[NASA-CASE-GSC-11095-1] c14 N72-10375
- Restraint torso for increased mobility and reduced physiological effects while wearing pressurized suits
[NASA-CASE-MSC-12397-1] c05 N72-25119
- Totally confined explosive welding --- apparatus to reduce noise level and protect personnel during explosive bonding
[NASA-CASE-LAR-10941-1] c37 N74-21057
- Deployable flexible ventral fins for use as an emergency spin recovery device in aircraft
[NASA-CASE-LAR-10753-1] c08 N74-30421
- Shoulder harness and lap belt restraint system
[NASA-CASE-ARC-10519-2] c05 N75-25915
- Fifth wheel
[NASA-CASE-FRC-10081-1] c37 N77-14477
- Microwave power transmission beam safety system
[NASA-CASE-NPO-14224-1] c33 N80-18287
- Safety shield for vacuum/pressure chamber viewing port
[NASA-CASE-GSC-12513-1] c31 N81-19343
- SAFETY FACTORS**
Safety flywheel --- using flexible materials energy storage
[NASA-CASE-HQN-10888-1] c44 N79-14527
- SAHA EQUATIONS**
Cosmic dust analyzer
[NASA-CASE-MSC-13802-2] c35 N76-15431
- SALT BATHS**
Application techniques for protecting materials during salt bath brazing
[NASA-CASE-XLE-00046] c15 N70-33311
- SAMARIUM**
Gadolinium or samarium doped-silicon semiconductor material with resistance to radiation damage for use in solar cells
[NASA-CASE-XLE-10715] c26 N71-23292
- SAMPLES**
Portable vacuum probe surface sampler for sampling large surface areas with relatively light loading densities of microorganisms
[NASA-CASE-LAR-10623-1] c14 N73-30395
- Method and device for destructive detection of a substance --- useful in determining the concentration of carbon fibers or pollutant particles
[NASA-CASE-NPO-14940-1] c35 N80-21723
- Mobile sampler for use in acquiring samples of terrestrial atmospheric gasses
[NASA-CASE-NPO-15220-1] c35 N81-24414
- Automated syringe sampler --- remote sampling of air and water
[NASA-CASE-LAR-12308-1] c35 N81-29407
- SAMPLES**
Plural output optometric sample cell and analysis system
[NASA-CASE-NPO-10233-1] c74 N78-33913
- SAMPLING**
Impact bit for cutting, collecting, and storing samples such as lunar rock cuttings
[NASA-CASE-XNP-01412] c15 N70-42034
- Design and development of fluid sample collector
[NASA-CASE-XMS-06767-1] c14 N71-20435
- Design and development of two types of atmosphere sampling chambers
[NASA-CASE-NPO-11373] c13 N72-25323
- Digital to analog converter for sampled signal reconstruction
[NASA-CASE-MSC-12458-1] c68 N73-32081
- Rock sampling --- apparatus for controlling particle size
[NASA-CASE-XNP-10007-1] c46 N74-23068
- Rock sampling --- method for controlling particle size distribution
[NASA-CASE-XNP-09755] c46 N74-23069
- Apparatus for microbiological sampling --- including automatic swabbing
[NASA-CASE-LAR-11069-1] c35 N75-12272
- Automatic biowaste sampling
[NASA-CASE-MSC-14640-1] c54 N76-14804
- Remote water monitoring system
[NASA-CASE-LAR-11973-1] c35 N78-27384
- CCD correlated quadruple sampling processor
[NASA-CASE-NPO-14426-1] c33 N79-17134
- Fluid sample collection and distribution system --- qualitative analysis of aqueous samples from several points
[NASA-CASE-MSC-16841-1] c34 N79-24285
- SANDWICH STRUCTURES**
Sandwich panel structure for removing heat from shield between hot and cold areas
[NASA-CASE-XLA-00349] c33 N70-37979
- Particle detector for measuring micrometeoroid velocity in space
[NASA-CASE-XLA-00495] c14 N70-41332
- Capacitor sandwich structure containing metal sheets of known thickness for counting penetration rates of meteoroids
[NASA-CASE-XLE-01246] c14 N71-10797
- Technique for making foldable, inflatable, plastic honeycomb core panels for use in building and bridge structures, light and radio wave reflectors, and spacecraft
[NASA-CASE-XLA-03492] c15 N71-22713
- Punch and die device for forming convolution series in thin gage metal hemispheres
[NASA-CASE-XNP-05297] c15 N71-23811
- Composite sandwich lattice structure
[NASA-CASE-LAR-11898-1] c24 N78-10214
- Low density bismaleimide-carbon microballoon composites
[NASA-CASE-ARC-11040-1] c24 N79-16915
- Superplastically formed diffusion bonded metallic structure
[NASA-CASE-FRC-11026-1] c39 N79-25424
- Multivall thermal protection system
[NASA-CASE-LAR-12620-1] c24 N80-12117
- SAPPHIRE**
Bonding of sapphire to sapphire by eutectic mixture of aluminum oxide and zirconium oxide
[NASA-CASE-GSC-11577-1] c37 N75-15992
- Bonding of sapphire to sapphire by eutectic mixture of aluminum oxide and zirconium oxide
[NASA-CASE-GSC-11577-3] c24 N79-25143
- SATELLITE ANTENNAS**
Monopole antenna system for maximum omnidirectional efficiency for use on satellites
[NASA-CASE-XLA-00414] c07 N70-38200
- Development of antenna system for spin stabilized communication satellite for simultaneous reception and transmission of data
[NASA-CASE-XGS-02607] c31 N71-23009
- Apparatus and method for determining the position of a radiant energy source
[NASA-CASE-GSC-12147-1] c32 N81-27341
- SATELLITE ATTITUDE CONTROL**
Photosensitive light source device for detecting unmanned spacecraft deviation from reference attitude
[NASA-CASE-XNP-00438] c21 N70-35089
- Attitude control system for spacecraft based on conversion of incident solar radiation on movable control surfaces into mechanical torques
[NASA-CASE-XNP-02982] c31 N70-41855
- Design and development of satellite despinn device
[NASA-CASE-XMF-08523] c31 N71-20396
- Utilization of momentum devices for forming attitude control and damping system for spacecraft
[NASA-CASE-XLA-02551] c21 N71-21708
- Gravity gradient attitude control system with gravity gradiometer and reaction wheels for artificial satellite attitude control
[NASA-CASE-GSC-10555-1] c21 N71-27324
- Method and apparatus for providing active attitude control for spacecraft by converting any attitude motion of vehicle into simple rotational motion
[NASA-CASE-HQN-10439] c21 N72-21624
- Momentum wheel design for spacecraft attitude control and magnetic drum and head system for data storage
[NASA-CASE-NPO-11481] c21 N73-13644
- Combination automatic-starting electrical plasma torch and gas shutoff valve --- for satellite attitude control
[NASA-CASE-XLE-10717] c37 N75-29426
- Attitude control system
[NASA-CASE-MFS-22787-1] c15 N77-10113
- Rim inertial measuring system
[NASA-CASE-LAR-12052-1] c18 N81-29152
- SATELLITE CONTROL**
Stabilization system for gravity-oriented satellites using single damper rod
[NASA-CASE-XAC-01591] c31 N71-17729

SATELLITE DESIGN

Inflation system for balloon type satellites
[NASA-CASE-XGS-03351] c31 N71-16081

SATELLITE INSTRUMENTS

Satellite stabilization reaction wheel scanner
[NASA-CASE-XGS-02629] c14 N71-21082

SATELLITE NETWORKS

Satellite network synchronization system with multiple access to multiplex repeater
[NASA-CASE-GSC-10390-1] c07 N72-11149

SATELLITE ORBITS

Development of method and apparatus for spinning satellite about selected axis after reaching predetermined orientation
[NASA-CASE-HQN-00936] c31 N71-29050

SATELLITE ORIENTATION

Sensing method and device for determining orientation of space vehicle or satellite by using particle traps
[NASA-CASE-XGS-00466] c21 N70-34297

Spin phase synchronization of cartwheel satellite in polar orbit
[NASA-CASE-XGS-05579] c31 N71-15676

Development of method and apparatus for spinning satellite about selected axis after reaching predetermined orientation
[NASA-CASE-HQN-00936] c31 N71-29050

Analog spatial maneuver computer with three output angles for obtaining desired spatial attitude
[NASA-CASE-GSC-10880-1] c08 N72-11172

SATELLITE PERTURBATION

Flexible turnstile antenna system for reducing nutation in spin-oriented satellites
[NASA-CASE-XMF-00442] c31 N71-10747

SATELLITE POWER TRANSMISSION (TO EARTH)

Microwave power transmission beam safety system
[NASA-CASE-NPO-14224-1] c33 N80-18287

SATELLITE ROTATION

Optical scanner mounted on rotating support structure with method of compensating for image or satellite rotation
[NASA-CASE-XGS-02401] c14 N69-27485

Stretch Yo-Yo mechanism for reducing initial spin rate of space vehicle
[NASA-CASE-XGS-00619] c30 N70-40016

Development of method and apparatus for spinning satellite about selected axis after reaching predetermined orientation
[NASA-CASE-HQN-00936] c31 N71-29050

SATELLITE SOLAR POWER STATIONS

Solar power satellite system
[NASA-CASE-HQN-10949-1] c44 N81-16530

SATELLITE TELEVISION

Adaptive signal generating system and logic circuits for satellite television systems
[NASA-CASE-GSC-11367] c10 N71-26374

SATELLITE TRACKING

Design and development of tracking receiver for tracking satellites and receiving radio signal transmissions under adverse noise conditions
[NASA-CASE-XGS-08679] c10 N71-21473

Simultaneous acquisition of tracking data from two stations
[NASA-CASE-NPO-13292-1] c32 N75-15654

Switchable beamwidth monopulse method and system
[NASA-CASE-GSC-11924-1] c33 N76-27472

SATELLITE TRANSMISSION

Asynchronous, multiplexing, single line transmission and recovery data system --- for satellite use
[NASA-CASE-NPO-13321-1] c32 N75-26195

SATELLITE-BORNE PHOTOGRAPHY

Rotary solenoid shutter drive assembly and rotary inertia damper and stop plate assembly --- for use with cameras mounted in satellites
[NASA-CASE-GSC-11560-1] c33 N74-20861

SATURATION

Saturable magnetic core and signal detection for indicating impending saturation
[NASA-CASE-ERC-10089] c23 N72-17747

SAWTOOTH WAVEFORMS

Linear sawtooth voltage wave generator with transistor timing circuit having capacitor and zener diode feedback loops
[NASA-CASE-XMS-01315] c09 N70-41675

SCANNERS

Electronic and mechanical scanning control system for monopulse tracking antenna

[NASA-CASE-XGS-05582] c07 N69-27460
Electronic background suppression field scanning sensor for detecting point source targets
[NASA-CASE-XGS-05211] c07 N69-39980
Electron beam scanning system for improved image definition and reduced power requirements for video signal transmission
[NASA-CASE-ERC-10552] c09 N71-12539
Satellite stabilization reaction wheel scanner
[NASA-CASE-XGS-02629] c14 N71-21082
Monopulse scanning network for scanning volumetric antenna pattern
[NASA-CASE-GSC-10299-1] c09 N71-24804
Scan oscilloscope for mapping surface sensitivity of photomultiplier tube
[NASA-CASE-LAB-10320-1] c09 N72-23172
Ultrasonic scanner for radial and flat panels
[NASA-CASE-MPS-20335-1] c35 N74-10415
Apparatus for scanning the surface of a cylindrical body
[NASA-CASE-NPO-11861-1] c36 N74-20009
Fast scan control for deflection type mass spectrometers
[NASA-CASE-LAB-11428-1] c35 N74-34857
Electronically scanned pressure sensor module with in situ calibration capability
[NASA-CASE-LAB-12230-1] c35 N79-14347
Scannable beam forming interferometer antenna array system
[NASA-CASE-GSC-12365-1] c32 N80-28578
Intrusion detection method and apparatus --- monitoring unwanted subterranean entry and departure
[NASA-CASE-ARC-11317-1] c35 N81-19430
Programmable scan/read circuitry for charge coupled device imaging detectors --- for a startracker
[NASA-CASE-NPO-15345-1] c33 N81-27403

SCANNING
Conversion system for transforming slow scan rate of Apollo TV camera on moon to fast scan of commercial TV
[NASA-CASE-XMS-07168] c07 N71-11300
Operation of vidicon tube for scanning spatial charge density pattern
[NASA-CASE-XNP-06028] c09 N71-23189
Position determination systems --- using orbital antenna scan of celestial bodies
[NASA-CASE-MSC-12593-1] c17 N76-21250
Magnetometer with a miniature transducer and automatic scanning
[NASA-CASE-LAB-11617-2] c35 N78-32397
System and method for character recognition
[NASA-CASE-NPO-11337-1] c74 N81-19896

SCATTERING CROSS SECTIONS
Method and means for helium/hydrogen ratio measurement by alpha scattering
[NASA-CASE-NFO-14079-1] c25 N80-20334

SCHLIEREN PHOTOGRAPHY
System and method for obtaining wide screen Schlieren photographs
[NASA-CASE-NPO-14174-1] c74 N79-20856

SCHMIDT CAMERAS
Cooled echelle grating spectrometer --- for space telescope applications
[NASA-CASE-NPO-14372-1] c35 N80-26635

SCHOOLS
Silent alarm system for multiple room facility or school
[NASA-CASE-NPO-11307-1] c10 N73-30205

SCHOTTKY DIODES
High voltage, high current Schottky barrier solar cell
[NASA-CASE-NPO-13482-1] c44 N78-13526
Solar cells having integral collector grids
[NASA-CASE-LBW-12819-1] c44 N79-11467
Back wall solar cell
[NASA-CASE-LBW-12236-2] c44 N79-14528
Schottky barrier cell and method of fabricating it
[NASA-CASE-NPO-13689-4] c44 N81-26553
Schottky barrier solar cell
[NASA-CASE-NFO-13689-2] c44 N81-29525

SCOOPS
Aeroflexible wing structure with air scoop for inflating stiffeners with ram air
[NASA-CASE-XLA-06095] c01 N69-39981

SCRAMBLING (COMMUNICATION)
Secure communication system
[NASA-CASE-MSC-16462-1] c32 N78-25274

SCREWS

Electromechanical control actuator system using double differential screws
[NASA-CASE-ERC-10022] c15 N71-26635
Adjustable support device with jacket screw for altering distance between base and supported member
[NASA-CASE-NPO-10721] c15 N72-27484

SCRUBBERS

Developing high pressure gas purification and filtration system for use in test operations of space vehicles
[NASA-CASE-MFS-12806] c14 N71-17588

SEA ICE

Laser technique for breaking ice in ship path
[NASA-CASE-LAR-10815-1] c16 N72-22520

SEA STATES

Oceanic wave measurement system
[NASA-CASE-MFS-23862-1] c48 N80-18667

SEALERS

Design and development of flexible joint for pressure suits
[NASA-CASE-XMS-09636] c05 N71-12344
Epoxy resin sealing device for electrochemical cells in high vacuum environments
[NASA-CASE-XGS-02630] c03 N71-22974
Leak resistant bonded elastomeric seal for secondary electrochemical cells
[NASA-CASE-XGS-02631] c03 N71-23006
Self lubricating fluoride-metal composite materials for outer space applications
[NASA-CASE-XLE-08511] c18 N71-23710
Polyimides of ether-linked aryl tetracarboxylic dianhydrides
[NASA-CASE-MFS-22355-1] c23 N76-15268

SEALING

Foil seal between parts moving relative to each other
[NASA-CASE-XLE-05130] c15 N69-21362
Sealed electric storage battery with gas manifold interconnecting each cell
[NASA-CASE-XNP-03378] c03 N71-11051
Epoxy resin sealing device for electrochemical cells in high vacuum environments
[NASA-CASE-XGS-02630] c03 N71-22974
Electrode sealing and insulation for fuel cells containing caustic liquid electrolytes using powdered plastic and metal
[NASA-CASE-XMS-01625] c15 N71-23022
Sealing evacuation port and evacuating vacuum container such as space jackets
[NASA-CASE-XNP-03290] c15 N71-23256
Segmented sealing surface in valve seat
[NASA-CASE-NPO-10606] c15 N72-25451
Heat sealable, flame and abrasion resistant coated fabric
[NASA-CASE-MSC-18382-1] c27 N80-24440

SEALS (STOPPERS)

Spacecraft battery seals
[NASA-CASE-XGS-03864] c15 N69-24320
Flexible inflatable seal for butterfly valves
[NASA-CASE-XLE-00101] c15 N70-33376
Shrink-fit vacuum system gas valve
[NASA-CASE-XGS-00587] c15 N70-35067
Thin walled pressure test vessel using low-melting alloy-filled joint to attach shell to heads
[NASA-CASE-XLE-04677] c15 N71-10577
Fluid seal formed by flexible disk on rotating shaft to retain lubricating oils around shaft
[NASA-CASE-XLE-05130-2] c15 N71-19570
Sealed storage container for channel carriers with mounted miniature electronic components
[NASA-CASE-MFS-20075] c09 N71-26133
Liquid-vapor interface seal design for turbine rotating shafts including helical and molecular pumps and liquid cooling of mercury vapor
[NASA-CASE-XNP-02862-1] c15 N71-26294
Spiral groove seal --- for rotating shaft
[NASA-CASE-XLE-10326-4] c37 N74-15125
Glass-to-metal seals comprising relatively high expansion metals
[NASA-CASE-LEW-10698-1] c37 N74-21063
High speed, self-acting shaft seal --- for use in turbine engines
[NASA-CASE-LEW-11274-1] c37 N75-21631
Method of forming shrink-fit compression seal
[NASA-CASE-LAR-11563-1] c37 N77-23482

Counter pumping debris excluder and separator

--- gas turbine shaft seals
[NASA-CASE-LEW-11855-1] c07 N78-25090
Composite seal for turbomachinery --- backings for turbine engine shrouds
[NASA-CASE-LEW-12131-1] c37 N79-18318
Retractable environmental seal
[NASA-CASE-MFS-23646-1] c37 N79-22474
Shaft seal assembly for high speed and high pressure applications
[NASA-CASE-LEW-11873-1] c37 N79-22475
Fluid pressure balanced seal
[NASA-CASE-XGS-01286-1] c37 N79-33469
Modified face seal for positive film stiffness
[NASA-CASE-LEW-12989-1] c37 N80-12414
Surface conforming thermal/pressure seal --- for control devices in space vehicles
[NASA-CASE-MSC-18422-1] c37 N80-14400
Continuous self-locking spiral wound seal --- for maintaining pressure between chambers in cryogenic wind tunnels
[NASA-CASE-LAR-12315-1] c37 N80-16339
Gas path seal
[NASA-CASE-NPO-12131-3] c37 N80-18400
Fully plasma-sprayed compliant backed ceramic turbine seal
[NASA-CASE-LEW-13268-1] c37 N80-24619
Composite seal for turbomachinery
[NASA-CASE-LEW-12131-2] c37 N80-26658
Circumferential shaft seal
[NASA-CASE-LEW-12119-1] c37 N80-28711
Thermal barrier pressure seal --- shielding junctions between spacecraft control surfaces and structures
[NASA-CASE-MSC-18134-1] c37 N81-15363

SEAMS (JOINTS)

Sealing apparatus for joining two pieces of frangible materials
[NASA-CASE-XLA-01494] c15 N71-24164
Cord restraint system for pressure suit joints
[NASA-CASE-XMS-09635] c05 N71-24623
Method of making pressure tight seal for super alloy
[NASA-CASE-LAR-10170-1] c37 N74-11301

SEAT BELTS

Shoulder harness and lap belt restraint system
[NASA-CASE-ARC-10519-2] c05 N75-25915

SEATS

Seat cushion to provide realistic acceleration cues to aircraft simulator pilot
[NASA-CASE-LAR-12149-2] c09 N79-31228

SECTORS

Journal Bearings
[NASA-CASE-LEW-11076-2] c37 N74-32921

SECURITY

Secure communication system
[NASA-CASE-MSC-16462-1] c32 N78-25274
Passive intrusion detection system
[NASA-CASE-NPO-13804-1] c33 N80-23559
Intrusion detection method and apparatus --- monitoring unwanted subterranean entry and departure
[NASA-CASE-ARC-11317-1] c35 N81-19430
Portable appliance security apparatus
[NASA-CASE-GSC-12399-1] c33 N81-25299

SEGMENTS

Fabrication of curved reflector segments for solar mirror
[NASA-CASE-XLE-08917] c15 N71-15597

SEISMIC WAVES

Determining sway of buildings by low frequency device using pendulum
[NASA-CASE-XNP-00479] c14 N70-34794
Seismic vibration source
[NASA-CASE-NPO-14112-1] c46 N79-22679
Underwater seismic source --- for petroleum exploration
[NASA-CASE-NPO-14255-1] c46 N79-23555

SEISMOGRAPHS

Intrusion detection method and apparatus --- monitoring unwanted subterranean entry and departure
[NASA-CASE-ARC-11317-1] c35 N81-19430

SELECTORS

Selector mechanism for mechanical separation and discrimination of high velocity molecular particles
[NASA-CASE-XLE-01533] c11 N71-10777

SELF ALIGNMENT

SUBJECT INDEX

Peak polarity selector for monitoring waveforms
[NASA-CASE-FRC-10010] c10 N71-24862

SELF ALIGNMENT
Electro-optical system for maintaining two-axis alignment during milling operations on large tank-sections
[NASA-CASE-XMF-00908] c14 N70-40238

SELF ERECTING DEVICES
Self-erectable space structures of flexible foam for application in planetary orbits
[NASA-CASE-XLA-00686] c31 N70-34135
Manned space station collapsible for launching and self-erectable in orbit
[NASA-CASE-XLA-00678] c31 N70-34296
Manned space station launched in packaged condition and self erecting in orbit
[NASA-CASE-XLA-00258] c31 N70-38676
Foldable conduit capable of springing back as self erecting structural member
[NASA-CASE-XLE-00620] c32 N70-41579
Antenna design with self erecting mesh reflector
[NASA-CASE-XGS-09190] c31 N71-16102
Self erecting parabolic reflector design for use in space
[NASA-CASE-XMS-03454] c09 N71-20658

SELF LUBRICATING MATERIALS
Self lubricating fluoride-metal composite materials for outer space applications
[NASA-CASE-XLE-08511] c18 N71-23710
Self lubricating gears and other mechanical parts having surface adapted to frictional contact
[NASA-CASE-MFS-14971] c15 N71-24984
Method of making bearing material
[NASA-CASE-LEW-11930-3] c24 N80-33482

SELF LUBRICATION
Method of making bearing materials --- self-lubricating, oxidation resistant composites for high temperature applications
[NASA-CASE-LEW-11930-4] c24 N79-17916

SELF MANEUVERING UNITS
Hand-held maneuvering unit for propulsion and attitude control of astronauts in zero or reduced gravity environment
[NASA-CASE-XMS-05304] c05 N71-12336
Lightweight propulsion unit for movement of personnel and equipment across lunar surface
[NASA-CASE-MFS-20130] c28 N71-27585

SELF PROPAGATION
Self-generating optical frequency waveguide
[NASA-CASE-HQN-10541-1] c07 N71-26291

SELF SEALING
Modification of one man life raft
[NASA-CASE-LAR-10241-1] c54 N74-14845
Self-stabilizing radial face seal
[NASA-CASE-LEW-12991-1] c37 N81-24442

SEMICONDUCTOR DEVICES
Fixture for simultaneously supporting several components for electrical testing
[NASA-CASE-XNP-06032] c09 N69-21526
Semiconductor p-n junction on needle apex to provide stress and strain sensor
[NASA-CASE-XLA-04980] c09 N69-27422
Selective gold diffusion on monolithic silicon chips for switching and nonswitching amplifier devices and circuits and linear and digital logic circuits
[NASA-CASE-ERC-10072] c09 N70-11148
Extra-long monostable multivibrator employing bistable semiconductor switch to allow charging of timing circuit
[NASA-CASE-XGS-00381] c09 N70-34819
Method of forming thin window drifted silicon charged particle detector
[NASA-CASE-XLE-00808] c24 N71-10560
Doping silicon material with gadolinium to increase radiation resistance of solar cells
[NASA-CASE-XLE-02792] c26 N71-10607
Separation of semiconductor wafer into chips bounded by scribe lines
[NASA-CASE-ERC-10138] c26 N71-14354
Voltage tunable Gunn effect semiconductor for microwave generation
[NASA-CASE-XER-07894] c09 N71-18721
Indicator device for monitoring charge of wet cell battery, using semiconductor light emitter and photodetector
[NASA-CASE-NPO-10194] c03 N71-20407

Signaling summary alarm circuit with semiconductor switch for faulty contact indications
[NASA-CASE-XLB-03061-1] c10 N71-24798

Method for temperature compensating semiconductor gages by exposure to high energy radiation
[NASA-CASE-XLA-04555-1] c14 N71-25892

Development and characteristics of fluid oscillator analog to digital converter with variable frequency controlled by signal passing through conditioning circuit
[NASA-CASE-LEW-10345-1] c10 N71-25899

Volume displacement transducer for leak detection in hermetically sealed semiconductor devices
[NASA-CASE-ERC-10033] c14 N71-26672
Inverter drive circuit for semiconductor switch
[NASA-CASE-LEW-10233] c10 N71-27126

Test chambers with orifice and helium mass spectrometer for detecting leak rate of encapsulated semiconductor devices
[NASA-CASE-ERC-10150] c14 N71-28992

Semiconductor device manufacture using refractory dielectrics as diffusant masks and interconnection insulating materials
[NASA-CASE-XER-08476-1] c26 N72-17820

Single crystal film semiconductor devices
[NASA-CASE-ERC-10222] c09 N72-22199

Development of process for forming insulating layer between two electrical conductor or semiconductor materials
[NASA-CASE-LEW-10489-1] c15 N72-25447

Multiterminal Gunn-type semiconductor microwave generator for producing stable signals
[NASA-CASE-XER-07895] c26 N72-25679

Miniature piezoelectric semiconductor transducer with in situ stress coupling
[NASA-CASE-ERC-10087-2] c14 N72-31446

Development and characteristics of hermetically sealed coaxial package for containing microwave semiconductor components
[NASA-CASE-GSC-10791-1] c15 N73-14469

Process for fabricating SiC semiconductor devices
[NASA-CASE-LEW-12094-1] c76 N76-25049

Semiconductor projectile impact detector
[NASA-CASE-MFS-23008-1] c35 N78-18390

Apparatus for use in examining the lattice of a semiconductor wafer by X-ray diffraction
[NASA-CASE-MFS-23315-1] c76 N78-24950

Apparatus for measuring semiconductor device resistance
[NASA-CASE-NPO-14424-1] c33 N80-32650

Electrical power generating system --- for windpowered generation
[NASA-CASE-MFS-24368-3] c33 N81-22280

Heat transparent high intensity high efficiency solar cell
[NASA-CASE-LEW-12892-1] c44 N81-27598

SEMICONDUCTOR JUNCTIONS
Gallium arsenide solar cell preparation by surface deposition of cuprous iodide on thin n-type polycrystalline layers and heating in iodine vapor
[NASA-CASE-XNP-01960] c09 N71-23027

Miniature electromechanical junction transducer operating on piezoelectric effect and utilizing epoxy for stress coupling component
[NASA-CASE-ERC-10087] c14 N71-27334

Resin for protecting p-n semiconductor junction surface
[NASA-CASE-ERC-10339-1] c18 N73-30532

JFET oscillator
[NASA-CASE-GSC-12555-1] c33 N80-26601

High voltage planar multijunction --- solar cells
[NASA-CASE-LEW-13400-1] c44 N81-16528

Schottky barrier cell and method of fabricating it
[NASA-CASE-NPO-13689-4] c44 N81-26553

SEMICONDUCTORS (MATERIALS)
Hole mobility of deposited semiconductor films in vacuum utilizing thermal gradient
[NASA-CASE-XKS-04614] c15 N69-21460

Semiconductor in resonant cavity for improving signal to noise ratio of communication receiver
[NASA-CASE-MSC-12259-1] c07 N70-12616

Improved semiconductor multivibrator circuit which approaches 100 percent efficiency
[NASA-CASE-IAC-00942] c10 N71-16042

- Fabrication of sintered impurity semiconductor brushes for electrical energy transfer
[NASA-CASE-XMF-01016] c26 N71-17818
- Binding layer of semiconductor particles by electrodeposition
[NASA-CASE-XNP-01959] c26 N71-23043
- Gadolinium or samarium doped-silicon semiconductor material with resistance to radiation damage for use in solar cells
[NASA-CASE-XLE-10715] c26 N71-23292
- Characteristics of infrared photodetectors manufactured from semiconductor material irradiated by electron beam
[NASA-CASE-LAR-10728-1] c14 N73-12445
- Traveling wave solid state amplifier utilizing a semiconductor with negative differential mobility
[NASA-CASE-HQN-10069] c33 N75-27251
- Vapor deposition apparatus --- semiconductors and gallium arsenides
[NASA-CASE-HQN-10462] c25 N75-29192
- Application of semiconductor diffusants to solar cells by screen printing
[NASA-CASE-LEW-12775-1] c44 N79-11468
- Method for the preparation of inorganic single crystal and polycrystalline electronic materials
[NASA-CASE-XLE-02545-1] c76 N79-21910
- Voltage feed through apparatus having reduced partial discharge
[NASA-CASE-GSC-12347-1] c33 N80-18286
- SENSITIVITY**
Design of active RC network capable of operating at high Q values with reduced sensitivity to gain amplification and number of passive components
[NASA-CASE-ARC-10042-2] c10 N72-11256
- SENSITOMETRY**
Condition sensor system and method
[NASA-CASE-MSC-14805-1] c54 N78-32720
- SENSORS**
Bonding method in the manufacture of continuous regression rate sensor devices
[NASA-CASE-LAR-10337-1] c24 N75-30260
- Medical subject monitoring systems --- multichannel monitoring systems
[NASA-CASE-MSC-14180-1] c52 N76-14757
- SENSORY PERCEPTION**
Prosthetic limb with tactile sensing device
[NASA-CASE-MFS-16570-1] c05 N73-32013
- SEPARATED FLOW**
Thrust vector control by secondary injection of fluid into rocket nozzle flow field to separate exhaust flow
[NASA-CASE-XLE-00208] c28 N70-34294
- Double hinged flap for boundary layer control over trailing edges of wings
[NASA-CASE-XLA-01290] c02 N70-42016
- Separation cell with permeable membranes for fluid mixture component separation
[NASA-CASE-XMS-02952] c18 N71-20742
- Flow separation detector
[NASA-CASE-ARC-11046-1] c35 N78-14364
- SEPARATORS**
Condenser-separator for dehumidifying air utilizing sintered metal surface
[NASA-CASE-XLA-08645] c15 N69-21465
- Umbilical separator for rockets
[NASA-CASE-XNP-00425] c11 N70-38202
- Liquid-gas separator adapted for use in zero gravity environment - drawings
[NASA-CASE-XMS-01624] c15 N70-40062
- Describing apparatus for separating gas from cryogenic liquid under zero gravity and for venting gas from fuel tank
[NASA-CASE-XLE-00586] c15 N71-15568
- Liquid-gaseous centrifugal separator for weightlessness environment
[NASA-CASE-XLA-00415] c15 N71-16079
- Development of liquid separating system using capillary device connected to flexible bladder storage chamber
[NASA-CASE-XMS-13052] c14 N71-20427
- Vapor-liquid separator design with vapor driven pump for separated liquid pumping for application in propellant transfer
[NASA-CASE-XNP-04042] c15 N71-23023
- Device for removing air from water for use in life support systems in manned space flight
[NASA-CASE-XLA-8914] c15 N73-12492
- Centrifugal lyophobic separator
[NASA-CASE-LAR-10194-1] c34 N74-30608
- Fluid control apparatus and method
[NASA-CASE-LAR-11110-1] c34 N75-26282
- Method and apparatus for fluffing, separating, and cleaning fibers
[NASA-CASE-LAR-11224-1] c37 N76-18456
- Gels as battery separators for soluble electrode cells
[NASA-CASE-LEW-12364-1] c44 N77-22606
- Low gravity phase separator
[NASA-CASE-MSC-14773-1] c35 N78-12390
- Automatic multiple-sample applicator and electrophoresis apparatus
[NASA-CASE-ARC-10991-1] c25 N78-14104
- Counter pumping debris excluder and separator --- gas turbine shaft seals
[NASA-CASE-LEW-11855-1] c07 N78-25090
- Formulated plastic separators for soluble electrode cells
[NASA-CASE-LEW-12358-2] c25 N78-25149
- Inorganic-organic separators for alkaline batteries
[NASA-CASE-LEW-12649-1] c44 N78-25530
- Formulated plastic separators for soluble electrode cells --- rubber-ion transport membranes
[NASA-CASE-LEW-12358-1] c44 N79-17313
- Water separator
[NASA-CASE-XMS-01295-1] c37 N79-21345
- In situ self cross-linking of polyvinyl alcohol battery separators
[NASA-CASE-LEW-12972-1] c44 N79-25481
- Flexible formulated plastic separators for alkaline batteries
[NASA-CASE-LEW-12363-4] c44 N80-18555
- Partial interlaminar separation system for composites
[NASA-CASE-LAR-12065-1] c24 N81-14000
- Advanced inorganic separators for alkaline batteries and method of making same --- a polymeric coating applied to a porous flexible substrate
[NASA-CASE-LEW-13171-1] c44 N81-22466
- Polyvinyl alcohol battery separator containing inert filler --- alkaline batteries
[NASA-CASE-LEW-13556-1] c44 N81-27615
- Electrophoresis device
[NASA-CASE-MFS-25426-1] c25 N81-29179
- Alkaline battery containing a separator of a cross-linked copolymer of vinyl alcohol and unsaturated carboxylic acid
[NASA-CASE-LEW-13102-1] c44 N81-29531
- SEQUENCING**
Synchronous counter design incorporating cascaded binary stages driven by previous stages and inputs through NAND gates
[NASA-CASE-XGS-02440] c08 N71-19432
- Pulse duration control device for driving slow response time loads in selected sequence including switching and delay circuits and magnetic storage
[NASA-CASE-XGS-04224] c10 N71-26418
- Digital function generator for generating any arbitrary single valued function
[NASA-CASE-NPO-11104] c08 N72-22165
- MOD 2 sequential function generator for multibit sequence, with two-bit shift register for each pair of bits
[NASA-CASE-NPO-10636] c08 N72-25210
- Linear shift register with feedback logic for generating pseudonoise linear recurring binary sequences
[NASA-CASE-NPO-11406] c08 N73-12175
- Mechanical sequencer
[NASA-CASE-MSC-19536-1] c37 N77-22482
- SEQUENTIAL ANALYSIS**
Binary coded sequential acquisition ranging system for distance measurements
[NASA-CASE-NPO-11194] c08 N72-25209
- Event sequence detector with several input and shift register responsive to clock pulses
[NASA-CASE-NPO-11703-1] c10 N73-32144
- SEQUENTIAL COMPUTERS**
Digital data reformatter/deserializer
[NASA-CASE-NPO-13676-1] c60 N79-20751
- SEQUENTIAL CONTROL**
Linear three-tap feedback shift register
[NASA-CASE-NPO-10351] c08 N71-12503

- Binary sequence detector with few memory elements and minimized logic circuit complexity
[NASA-CASE-XNP-05415] c08 N71-12505
- Sequencing device utilizing planetary gear set
[NASA-CASE-MSC-19514-1] c37 N79-20377
- SERUMS**
- Reduction of blood serum cholesterol
[NASA-CASE-NPO-12119-1] c52 N75-15270
- SERVICE LIFE**
- Service life of electromechanical device for generating sine/cosine functions
[NASA-CASE-LAR-10503-1] c09 N72-21248
- SERVOAMPLIFIERS**
- Pneumatic servoamplifier for controlling flow regulation
[NASA-CASE-MSC-12121-1] c15 N71-27147
- SERVOCONTROL**
- Electronic and mechanical scanning control system for monopulse tracking antenna
[NASA-CASE-XGS-05582] c07 N69-27460
- Proportional controller for regulating aircraft or spacecraft motion about three axes
[NASA-CASE-XAC-03392] c03 N70-41954
- Modulating and controlling intensity of light beam from high temperature source by servocontrolled rotating cylinders
[NASA-CASE-XMS-04300] c09 N71-19479
- Servocontrol system for measuring local stresses at geometric discontinuity in stressed material
[NASA-CASE-XLA-08530] c32 N71-25360
- System to control speed of hydraulically movable members by limiting energy applied to actuators with hydraulic servo loop
[NASA-CASE-ARC-10131-1] c15 N71-27754
- Digital servo controller --- for rotating antenna shaft
[NASA-CASE-KSC-10769-1] c33 N74-29556
- Digital servo control of random sound test excitation --- in reverberant acoustic chamber
[NASA-CASE-NPO-11623-1] c71 N74-31148
- Phase-locked servo system --- for synchronizing the rotation of slip ring assembly
[NASA-CASE-MFS-22073-1] c33 N75-13139
- Servo-controlled intravitral microscope system
[NASA-CASE-NPO-13214-1] c35 N75-25123
- Autonomous navigation system --- gyroscopic pendulum for air navigation
[NASA-CASE-ARC-11257-1] c04 N81-21047
- System for moving a probe to follow movements of tissue
[NASA-CASE-NPO-15197-1] c52 N81-26697
- SERVOMECHANISMS**
- Servo system for retroreflector of Michelson interferometer
[NASA-CASE-NPO-10300] c14 N71-17662
- Mechanical function generators with potentiometer as sensing element
[NASA-CASE-XAC-00001] c15 N71-28552
- Closed loop servosystem for variable speed tape recorders onboard spacecraft
[NASA-CASE-NPO-10700] c07 N71-33613
- Characteristics of lightweight actuator for imparting linear motion using elongated output shaft
[NASA-CASE-NPO-11222] c15 N72-25456
- Development and characteristics of rotary actuator for use on spacecraft to deploy and support pivotal structures such as solar panels
[NASA-CASE-NPO-10680] c31 N73-14855
- Hydraulic drain means for servo-systems
[NASA-CASE-NPO-10316-1] c37 N77-22479
- Actuator mechanism
[NASA-CASE-GSC-11883-2] c37 N78-31426
- Apparatus for providing a servo drive signal in a high-speed stepping interferometer
[NASA-CASE-NPO-13569-2] c35 N79-14348
- A hydraulic actuator mechanism to control aircraft spoiler movements through dual input commands
[NASA-CASE-LAR-12412-1] c05 N80-11065
- Automated syringe sampler --- remote sampling of air and water
[NASA-CASE-LAR-12308-1] c35 N81-29407
- Electrical servo actuator bracket --- fuel control valves on jet engines
[NASA-CASE-FRC-11044-1] c37 N81-33483
- SERVOMOTORS**
- Automatic closed circuit television arc guidance control for welding joints
- [NASA-CASE-MFS-13046] c07 N71-19433
- Electric motor control system with pulse width modulation for providing automatic null seeking servo
[NASA-CASE-XMF-05195] c10 N71-24861
- Development and characteristics of cyclically operable, optical shutter for use as focal plane shutter for transmitting single radiation pulses
[NASA-CASE-NPO-10758] c14 N73-14427
- Development and characteristics of rotary actuator for use on spacecraft to deploy and support pivotal structures such as solar panels
[NASA-CASE-NPO-10680] c31 N73-14855
- Velocity servo for continuous scan Fourier interference spectrometer
[NASA-CASE-NPO-14093-1] c35 N80-20563
- SHAFTS (MACHINE ELEMENTS)**
- Fatigue resistant shear pin with hollow shaft and two plugs
[NASA-CASE-XLA-09122] c15 N69-27505
- Elastic universal joint for rocket motor mounting
[NASA-CASE-XNP-00416] c15 N70-36947
- Air brake device for absorbing and measuring power from rotating shafts
[NASA-CASE-XLE-00720] c14 N70-40201
- Two axis flight controller with potentiometer control shafts directly coupled to rotatable ball members
[NASA-CASE-XFB-04104] c03 N70-42673
- Ratchet mechanism for high speed operation at reduced backlash
[NASA-CASE-MFS-12805] c15 N71-17805
- Universal joints for connecting two displaced shafts or members
[NASA-CASE-NPO-10646] c15 N71-28467
- Development of mating flat surfaces to inhibit leakage of fluid around shafts
[NASA-CASE-XLE-10326-2] c15 N72-29488
- Fatigue life of hybrid antifriction bearings at ultrahigh speeds
[NASA-CASE-LEW-11152-1] c15 N73-32359
- Spiral groove seal --- for hydraulic rotating shaft
[NASA-CASE-LEW-10326-3] c37 N74-10474
- Hole cutter --- drill bits and rotating shaft
[NASA-CASE-MFS-22649-1] c37 N75-25186
- Non-floating universal joint
[NASA-CASE-MSC-19546-1] c37 N77-25536
- Twin-capacitive shaft angle encoder with analog output signal
[NASA-CASE-ARC-10897-1] c33 N77-31404
- Counter pumping debris excluder and separator --- gas turbine shaft seals
[NASA-CASE-LEW-11855-1] c07 N78-25090
- Sequencing device utilizing planetary gear set
[NASA-CASE-MSC-19514-1] c37 N79-20377
- Shaft seal assembly for high speed and high pressure applications
[NASA-CASE-LEW-11873-1] c37 N79-22475
- Hermetic seal for a shaft
[NASA-CASE-NPO-15115-1] c37 N80-25660
- Speed control device for a heavy duty shaft --- solar sails for spacecraft propulsion
[NASA-CASE-NPO-14170-1] c37 N81-15364
- Hot gas engine with dual crankshafts
[NASA-CASE-NPO-14221-1] c37 N81-25370
- Circumferential shaft seal
[NASA-CASE-LEW-12119-2] c37 N81-26447
- SHALE OIL**
- In-situ laser retorting of oil shale
[NASA-CASE-LEW-12217-1] c43 N78-14452
- SHALES**
- Coal-shale interface detection
[NASA-CASE-MFS-23720-3] c43 N79-25443
- Coal-shale interface detection system
[NASA-CASE-MFS-23720-2] c43 N80-14423
- Coal-shale interface detector
[NASA-CASE-MFS-23720-1] c43 N80-23711
- SHAPED CHARGES**
- Coupling device for linear shaped charge for space vehicle abort system
[NASA-CASE-XLA-00189] c33 N70-36846
- Development of remotely controlled shaped charge for lateral displacement of rocket stages after separation
[NASA-CASE-XLA-04804] c31 N71-23008
- SHAPERS**
- Mandrel for shaping solid propellant rocket fuel

- into engine casing
[NASA-CASE-XLA-00304] c27 N70-34783
- Hand tool for forming dimples and nipples on end portion of tubes
[NASA-CASE-XMS-06876] c15 N71-21536
- Dielectric apparatus for heating, fusing, and hardening of organic matrix to form plastic material into shaped product
[NASA-CASE-LAR-10121-1] c15 N71-26721
- SHARKS**
Conditioning tanned sharkskin for use as abrasive resistant clothing
[NASA-CASE-XMS-09691-1] c18 N71-15545
- SHARPNESS**
Method of forming a sharp edge on an optical device
[NASA-CASE-GSC-12348-1] c74 N80-24149
- SHEAR CREEP**
Measuring shear-creep compliance of solid and liquid materials used in spacecraft components
[NASA-CASE-XLE-01481] c14 N71-10781
- SHEAR FLOW**
Shear modulated fluid amplifier of high pressure hydraulic vortex amplifier type
[NASA-CASE-MFS-10412] c12 N71-17578
- SHEAR PROPERTIES**
Describing instrument capable of measuring true shear viscosity of liquids and viscoelastic materials
[NASA-CASE-XMP-09462] c14 N71-17584
- SHEAR STRESS**
Fatigue resistant shear pin with hollow shaft and two plugs
[NASA-CASE-XLA-09122] c15 N69-27505
- Development of combined velocimeter and accelerometer based on color changes in liquid crystalline material subjected to shear stresses
[NASA-CASE-ERC-10292] c14 N72-25410
- Bonded joint and method --- for reducing peak shear stress in adhesive bonds
[NASA-CASE-LAR-10900-1] c37 N74-23064
- SHELLS (STRUCTURAL FORMS)**
Channel-type shell construction for rocket engines and related configurations
[NASA-CASE-XLE-00144] c28 N70-34860
- SHIELDING**
Flexible bellows joint shielding sleeve for propellant transfer pipelines
[NASA-CASE-XMP-01855] c15 N71-28937
- Shielded flat conductor cable of ribbonlike wires laminates in thin flexible insulation
[NASA-CASE-MFS-13687-2] c09 N72-22198
- System for the measurement of ultra-low stray light levels --- determining the adequacy of large space telescope systems
[NASA-CASE-MFS-23513-1] c74 N79-11865
- SHIFT REGISTERS**
Binary to binary-coded decimal converter using single set of logic circuits notwithstanding number of shift register decades
[NASA-CASE-XMP-00432] c08 N70-35423
- Linear three-tap feedback shift register
[NASA-CASE-NPO-10351] c08 N71-12503
- Computer circuit performing both counting and shifting logic operations also capable of miniaturization and integration in basic circuits
[NASA-CASE-XMP-01753] c08 N71-22697
- Commutator for steering precisely controlled bidirectional currents through numerous loads by use of magnetic core shift registers
[NASA-CASE-NPO-10743] c08 N72-21199
- Multistage feedback shift register with states decomposable into cycles of equal length
[NASA-CASE-NPO-11082] c08 N72-22167
- MOD 2 sequential function generator for multibit sequence, with two-bit shift register for each pair of bits**
[NASA-CASE-NPO-10636] c08 N72-25210
- Linear shift register with feedback logic for generating pseudonoise linear recurring binary sequences
[NASA-CASE-NPO-11406] c08 N73-12175
- Family of *n*-ary linear feedback shift register with binary logic
[NASA-CASE-NPO-11868] c10 N73-20254
- Nonrecursive counting digital filter containing shift register
[NASA-CASE-NPO-11821-1] c08 N73-26175
- Event sequence detector with several input and shift register responsive to clock pulses
[NASA-CASE-NPO-11703-1] c10 N73-32144
- Method and apparatus for decoding compatible convolutional codes
[NASA-CASE-MSC-14070-1] c32 N74-32598
- Nonlinear nonsingular feedback shift registers
[NASA-CASE-NPO-13451-1] c33 N76-14373
- Selective data segment monitoring system --- using shift registers
[NASA-CASE-ARC-10899-1] c60 N77-19760
- Digital data reformatter/deserializer
[NASA-CASE-NPO-13676-1] c60 N79-20751
- SHOCK ABSORBERS**
Pivotal shock absorbing assembly for use as load distributing portion in landing gear systems of space vehicles
[NASA-CASE-XMP-03856] c31 N70-34159
- Energy dissipating shock absorbing system for land payload recovery or vehicle braking
[NASA-CASE-XLA-00754] c15 N70-34850
- Shock absorbing couch for body support under high acceleration or deceleration forces
[NASA-CASE-XMS-01240] c05 N70-35152
- Low onset rate energy absorber in form of strut assembly for crew couch of Apollo command module
[NASA-CASE-MSC-12279-1] c15 N70-35679
- Landing pad assembly for aerospace vehicles
[NASA-CASE-XMP-02853] c31 N70-36654
- Spacecraft shock absorbing system for soft landings
[NASA-CASE-XMP-02108] c31 N70-36845
- Shock absorber for landing gear of lunar or planetary landing modules
[NASA-CASE-XMP-01045] c15 N70-40354
- Shock absorbing articulated multiple couch assembly
[NASA-CASE-MSC-11253] c05 N71-12343
- Design and development of double acting shock absorber for spacecraft docking operations
[NASA-CASE-XMS-03722] c15 N71-21530
- Impact energy absorber with decreasing absorption rate
[NASA-CASE-XLA-01530] c14 N71-23092
- Energy absorbing crew couch strut for Apollo command module
[NASA-CASE-MSC-12279] c15 N72-17450
- Shock absorber for use as protective barrier in impact energy absorbing system
[NASA-CASE-NPO-10671] c15 N72-20443
- Translatory shock absorber for attitude sensors
[NASA-CASE-MFS-22905-1] c19 N76-22284
- Vehicular impact absorption system
[NASA-CASE-NPO-14014-1] c37 N79-10420
- SHOCK LOADS**
Damper system for alleviating air flow shock loads on wind tunnel models
[NASA-CASE-XLA-09480] c11 N71-33612
- SHOCK MEASURING INSTRUMENTS**
Semiconductor projectile impact detector
[NASA-CASE-MFS-23008-1] c35 N78-18390
- SHOCK RESISTANCE**
Removable potting compound for instrument shock protection
[NASA-CASE-XLA-00482] c15 N70-36409
- Thermal shock resistant hafnia ceramic materials
[NASA-CASE-LAR-10894-1] c18 N73-14584
- Thermal shock and erosion resistant tantalum carbide ceramic material
[NASA-CASE-LAR-11902-1] c27 N78-17206
- Laser surface fusion of plasma sprayed ceramic turbine seals
[NASA-CASE-LEW-13269-1] c27 N81-22190
- SHOCK TUBES**
Knife structure for controlling rupture of shock tube diaphragms
[NASA-CASE-XAC-00731] c11 N71-15960
- Design, development, and operation of shock tube with bypass piston tunnel
[NASA-CASE-NPO-12109] c11 N72-22245
- Annular arc accelerator shock tube
[NASA-CASE-NPO-13528-1] c09 N77-10071
- SHOCK WAVE INTERACTION**
Absorptive, nonreflecting barrier mounted between closely spaced jet engines on supersonic aircraft, for preventing shock wave interference
[NASA-CASE-XLA-02865] c28 N71-15563

SHOCK WAVE LUMINESCENCE

Method and apparatus for measuring shock layer radiation distribution about high velocity objects

[NASA-CASE-XAC-02970] c14 N69-39896

SHOCK WAVE PROFILES

Method and apparatus for measuring shock layer radiation distribution about high velocity objects

[NASA-CASE-XAC-02970] c14 N69-39896

SHOCK WAVES

Apparatus for mechanically dispersing ultrafine metal powders subjected to shock waves

[NASA-CASE-XLE-04946] c17 N71-24511

Electrical device for developing converging spherical shock waves

[NASA-CASE-MFS-20890] c14 N72-22439

Production of intermetallic compounds by effect of shock waves from explosions and compaction of powder

[NASA-CASE-MFS-20861-1] c18 N73-32437

Shock position sensor for supersonic inlets --- measuring pressure in the throat of a supersonic inlet

[NASA-CASE-LEW-11915-1] c35 N76-14431

SHOES

Jet shoes for space locomotion

[NASA-CASE-XLA-08491] c05 N69-21380

SHORT CIRCUITS

Use of silicon controlled rectifier shorting circuit to protect thermoelectric generator source from thermal destruction

[NASA-CASE-XGS-04808] c03 N69-25146

Vacuum thermionic converter with short-circuited triodes and increased electron transmission and conversion efficiency

[NASA-CASE-XLE-01015] c03 N69-39898

Apparatus for automatically testing analog to digital converters for open and short circuits

[NASA-CASE-XLA-06713] c14 N71-28991

Apparatus including a plurality of spaced transformers for locating short circuits in cables

[NASA-CASE-KSC-10899-1] c33 N79-18193

Electrical short locator --- identifying shorts occurring while an electrical system is being wired

[NASA-CASE-ARC-11116-1] c33 N79-31498

SHOT PEENING

Method of peening and portable peening gun

[NASA-CASE-MFS-23047-1] c37 N76-18454

SHROUDED NOZZLES

Two dimensional wedge/translating shroud nozzle

[NASA-CASE-LAR-11919-1] c67 N78-27121

SHROUDED TURBINES

Composite seal for turbomachinery --- backings

for turbine engine shrouds

[NASA-CASE-LEW-12131-1] c37 N79-18318

Gas path seal

[NASA-CASE-NPO-12131-3] c37 N80-18400

Composite seal for turbomachinery

[NASA-CASE-LEW-12131-2] c37 N80-26658

Laser surface fusion of plasma sprayed ceramic turbine seals

[NASA-CASE-LEW-13269-1] c27 N81-22190

SHROUDS

Shrouded composite propulsion system configuration

[NASA-CASE-XLA-01043] c28 N71-10780

Composite seal for turbomachinery --- backings for turbine engine shrouds

[NASA-CASE-LEW-12131-1] c37 N79-18318

SHUTTERS

High speed shutter --- electrically actuated ribbon loop for shuttering optical or fluid passageways

[NASA-CASE-ARC-10516-1] c70 N74-21300

SIDE BANDS

Phase locked loop with sideband rejecting properties in continuous wave tracking radar

[NASA-CASE-XNP-02723] c07 N70-41680

SIDELOBE REDUCTION

Multiple mode horn antenna with radiation pattern of equal beamwidths and suppressed sidelobes

[NASA-CASE-XNP-01057] c07 N71-15907

SIGNAL ANALYSIS

Design and development of signal detection and tracking apparatus

[NASA-CASE-XGS-03502] c10 N71-20652

Method and apparatus for a single channel digital communications system ---

synchronization of received PCM signal by

digital correlation with reference signal

[NASA-CASE-NPO-11302-2] c32 N74-10132

Differential phase shift keyed signal resolver

[NASA-CASE-MSC-14066-1] c33 N74-27705

Correlation type phase detector --- with time correlation integrator for frequency

multiplexed signals

[NASA-CASE-GSC-11744-1] c33 N75-26243

Real time analysis of voiced sounds

[NASA-CASE-NPO-13465-1] c32 N76-31372

Digital plus analog output encoder

[NASA-CASE-GSC-12115-1] c62 N76-31946

Serial data correlator/code translator

[NASA-CASE-KSC-11025-1] c32 N79-28383

SIGNAL ANALYZERS

Monitoring system for signal amplitude ranges over predetermined time interval

[NASA-CASE-XMS-04061-1] c09 N69-39885

Feedback controller for sampling error signals

within single control formulation time interval

[NASA-CASE-GSC-10554-1] c08 N71-29033

Development of family of frequency to amplitude converters for frequency analysis of complex

input signal waveforms

[NASA-CASE-MSC-12395] c09 N72-25257

Device for performing statistical time-series

analysis of complex electrical signal waveforms

[NASA-CASE-MSC-12428-1] c10 N73-25240

Pulse stretcher for narrow pulses

[NASA-CASE-MSC-14130-1] c33 N74-32711

Electronic optical transfer function analyzer

[NASA-CASE-MFS-21672-1] c74 N76-19935

Speech analyzer

[NASA-CASE-GSC-11898-1] c32 N77-30309

SIGNAL DETECTION

Position locating system for remote aircraft

using voice communication and digital signals

[NASA-CASE-GSC-10087-2] c21 N71-13958

Saturable magnetic core and signal detection for

indicating impending saturation

[NASA-CASE-BRC-10089] c23 N72-17747

Anti-multipath digital signal detector

[NASA-CASE-LAR-11827-1] c32 N77-10392

Multiple rate digital command detection system

with range clean-up capability

[NASA-CASE-NPO-13753-1] c32 N77-20289

Automatic communication signal monitoring system

[NASA-CASE-NPO-13941-1] c32 N79-10262

Apparatus and method for stabilized phase

detection for binary signal tracking loops

[NASA-CASE-MSC-16461-1] c33 N79-11313

Photocapacitive image converter

[NASA-CASE-LAR-12513-1] c33 N80-28635

Reconfiguring redundancy management

[NASA-CASE-MSC-18498-1] c60 N80-30050

Receiving and tracking phase modulated signals

[NASA-CASE-MSC-16170-2] c32 N81-16338

SIGNAL DETECTORS

Roughness detector for recording surface pattern

of irregularities

[NASA-CASE-XLA-00203] c14 N70-34161

Electrical testing apparatus for detecting

amplitude and width of transient pulse

[NASA-CASE-XNP-06519] c09 N71-12519

System for monitoring presence of neutrals in

streams of ions - ion engine control

[NASA-CASE-XNP-02592] c24 N71-20518

Development of apparatus for generating output

signal commensurate with information contained

in input signal

[NASA-CASE-BRC-10041] c08 N71-29138

Coal-shale interface detection system

[NASA-CASE-MFS-23720-2] c43 N80-14423

Pulse transducer with artifact signal attenuator

--- heart rate sensors

[NASA-CASE-BRC-11012-1] c52 N80-23969

Self-calibrating threshold detector

[NASA-CASE-MSC-16370-1] c35 N81-19427

Maser amplifier slow wave structure ---

detecting weak signals from spacecraft

[NASA-CASE-NPO-15211-1] c36 N81-24425

SIGNAL DISTORTION

Low distortion receiver for hi-level baseband

PCM waveforms

[NASA-CASE-MSC-14557-1] c32 N76-16249

SIGNAL ENCODING

Adaptive compression signal processor for PCM communication systems
[NASA-CASE-XLA-03076] c07 N71-11266

Secure communication system
[NASA-CASE-MSC-16462-1] c32 N78-25274

Self-calibrating threshold detector
[NASA-CASE-MSC-16370-1] c35 N81-19427

SIGNAL GENERATORS

Plural recorder system which limits signal recording to signals of sufficient interest
[NASA-CASE-XMS-06949] c09 N69-21467

Alternating current signal generator providing plurality of amplitude modulated output signals
[NASA-CASE-XNP-05612] c09 N69-21468

Circuitry for generating sync signals in FM communication systems including video information
[NASA-CASE-XNP-10830] c07 N71-11281

Apparatus for generating microwave signals at progressively related phase angles for driving antenna array
[NASA-CASE-ERC-10046] c10 N71-18722

System generating sidereal frequency signals from signals of standard solar frequency without use of mixing operations or feedback loops
[NASA-CASE-XGS-02610] c14 N71-23174

Hand controller operable about three respectively perpendicular axes and capable of actuating signal generators for attitude control devices
[NASA-CASE-XMS-07467] c15 N71-23255

Voltage controlled oscillators and pulse amplitude modulation for signal ratio system
[NASA-CASE-XMF-04367] c09 N71-23545

Sampling circuit for signal processing in multiplex transmission by Fourier analysis
[NASA-CASE-NPO-10388] c07 N71-24622

Signaling summary alarm circuit with semiconductor switch for faulty contact indications
[NASA-CASE-XLE-03061-1] c10 N71-24798

Adaptive signal generating system and logic circuits for satellite television systems
[NASA-CASE-GSC-11367] c10 N71-26374

Device for monitoring voltage by generating signal when voltages drop below predetermined value
[NASA-CASE-KSC-10020] c10 N71-27338

System for control of variable signal generator
[NASA-CASE-NPO-11064] c07 N72-11150

Digital function generator for generating any arbitrary single valued function
[NASA-CASE-NPO-11104] c08 N72-22165

Development of Hall effect transducer for converting mechanical shaft rotations into proportional electrical signals
[NASA-CASE-LAR-10620-1] c09 N72-25255

Multiterminal Gunn-type semiconductor microwave generator for producing stable signals
[NASA-CASE-XER-07895] c26 N72-25679

Audio frequency analysis circuit for determining, displaying, and recording frequency of sweeping audio frequency signal
[NASA-CASE-NPO-11147] c14 N72-27408

Digital servo control of random sound test excitation --- in reverberant acoustic chamber
[NASA-CASE-NPO-11623-1] c71 N74-31148

Signal conditioner test set
[NASA-CASE-KSC-10750-1] c35 N75-12270

System for generating timing and control signals
[NASA-CASE-NPO-13125-1] c33 N75-19519

Pseudo-noise test set for communication system evaluation --- test signals
[NASA-CASE-MFS-22671-1] c35 N75-21582

NDIR gas analyzer based on absorption modulation ratios for known and unknown samples
[NASA-CASE-ARC-10802-1] c35 N75-30502

Twin-capacitive shaft angle encoder with analog output signal
[NASA-CASE-ARC-10897-1] c33 N77-31404

Apparatus for providing a servo drive signal in a high-speed stepping interferometer
[NASA-CASE-NPO-13569-2] c35 N79-14348

Versatile LDV burst simulator
[NASA-CASE-LAR-11859-1] c35 N79-14349

Underwater seismic source --- for petroleum exploration

[NASA-CASE-NPO-14255-1] c46 N79-23555

Photoelectric detection system
[NASA-CASE-MFS-23776-1] c74 N80-25134

Frequency translating phase conjugation circuit for active retrodirective antenna array --- microwave transmission
[NASA-CASE-NPO-14536-1] c32 N81-14185

Integrated control system for a gas turbine engine
[NASA-CASE-LEW-12594-2] c07 N81-19116

Adaptive reference voltage generator for firing angle control of line-commutated inverters
[NASA-CASE-MFS-25215-1] c33 N81-31481

SIGNAL MIXING

Impedance transformation device for signal mixing
[NASA-CASE-XGS-01110] c07 N69-24334

Baseband signal combiner for large aperture antenna array
[NASA-CASE-NPO-14641-1] c32 N81-29308

SIGNAL PROCESSING

Adaptive compression signal processor for PCM communication systems
[NASA-CASE-XLA-03076] c07 N71-11266

Conversion system for transforming slow scan rate of Apollo TV camera on moon to fast scan of commercial TV
[NASA-CASE-XMS-07168] c07 N71-11300

Difference indicating circuit used in conjunction with device measuring gravitational fields
[NASA-CASE-XNP-06274] c10 N71-13537

Circuitry for developing autocorrelation function continuously within signal receiving period
[NASA-CASE-XNP-00746] c07 N71-21476

System generating sidereal frequency signals from signals of standard solar frequency without use of mixing operations or feedback loops
[NASA-CASE-XGS-02610] c14 N71-23174

Feedback integrating circuit with grounded capacitor for signal processing
[NASA-CASE-IAC-10607] c10 N71-23669

Sampling circuit for signal processing in multiplex transmission by Fourier analysis
[NASA-CASE-NPO-10388] c07 N71-24622

Video signal processing system for sampling video brightness levels
[NASA-CASE-NPO-10140] c07 N71-24742

Monopulse scanning network for scanning volumetric antenna pattern
[NASA-CASE-GSC-10299-1] c09 N71-24804

Apparatus for filtering input signals
[NASA-CASE-NPO-10198] c09 N71-24806

Video sync processor with phase locked system
[NASA-CASE-KSC-10002] c10 N71-25865

Transient video-signal tape recorder with expanded playback
[NASA-CASE-ARC-10003-1] c09 N71-25866

Scanning signal phase and amplitude electronic control device with hybrid T waveguide junction
[NASA-CASE-NPO-10302] c10 N71-26142

Variable frequency nuclear magnetic resonance spectrometer providing drive signals over wide frequency range and minimizing noise effects
[NASA-CASE-XNP-09830] c14 N71-26266

Development of apparatus for generating output signal commensurate with information contained in input signal
[NASA-CASE-ERC-10041] c08 N71-29138

Development of electric circuit for production of different pulse width signals
[NASA-CASE-XLA-07788] c09 N71-29139

Phase shifting circuit for selecting phase of input signal
[NASA-CASE-ARC-10269-1] c10 N72-16172

Processing system for semiperiodic electrical signals to produce real time contoured display
[NASA-CASE-MSC-13407-1] c10 N72-20225

Design and characteristics of recording system for selective reprocessing and filtering of data to obtain optimum signal to noise ratios
[NASA-CASE-ERC-10112] c07 N72-21119

Technique for deriving logarithm of input signal using exponentially varying electric signal inversely
[NASA-CASE-ERC-10267] c09 N72-23173

Development and characteristics of telemetry system using computer-accessed circuits and remotely controlled from ground station

[NASA-CASE-NPO-11358] c07 N72-25172
 Characteristics of digital data processor using pulse from clock source to derive binary singles to show state of various indicators in processor
 [NASA-CASE-GSC-10975-1] c08 N73-13187
 Characteristics of two channel telemetry system with two data rate channels for high and low data rate communication
 [NASA-CASE-NPO-11572] c07 N73-16121
 Measurement system for physical quantity represented by or converted to variable frequency signal
 [NASA-CASE-MFS-20658-1] c14 N73-30386
 Digital to analog converter for sampled signal reconstruction
 [NASA-CASE-MSC-12458-1] c08 N73-32081
 Fluid pressure amplifier and system
 [NASA-CASE-LAR-10868-1] c33 N74-11050
 Low level signal limiter
 [NASA-CASE-XLE-04791] c32 N74-22696
 Miniature multichannel biotelemetry system
 [NASA-CASE-NPO-13065-1] c52 N74-26625
 Apparatus and method for processing Korotkov sounds --- for blood pressure measurement
 [NASA-CASE-MSC-13999-1] c52 N74-26626
 Pulse stretcher for narrow pulses
 [NASA-CASE-MSC-14130-1] c33 N74-32711
 Continuous Fourier transform method and apparatus --- for the analysis of simultaneous analog signal components
 [NASA-CASE-ARC-10466-1] c60 N75-13539
 Signal conditioning circuit apparatus --- with constant input impedance
 [NASA-CASE-ARC-10348-1] c33 N75-19518
 Television noise reduction device
 [NASA-CASE-MSC-12607-1] c32 N75-21485
 Isolated output system for a class D switching-mode amplifier
 [NASA-CASE-MFS-21616-1] c33 N75-30429
 Compact-bi-phase pulse coded modulation decoder
 [NASA-CASE-KSC-10834-1] c33 N76-14371
 Filtering device --- removing electromagnetic noise from voice communication signals
 [NASA-CASE-MFS-22729-1] c32 N76-21366
 System for measuring Reynolds in a turbulently flowing fluid --- signal processing
 [NASA-CASE-ARC-10755-2] c34 N76-27517
 Three phase full wave dc motor decoder
 [NASA-CASE-GSC-11824-1] c33 N77-26386
 Apparatus for determining thermophysical properties of test specimens
 [NASA-CASE-LAR-11883-1] c09 N77-27131
 Analog to digital converter for two-dimensional radiant energy array computers
 [NASA-CASE-GSC-11839-3] c60 N77-32731
 Hearing aid malfunction detection system
 [NASA-CASE-MSC-14916-1] c33 N78-10375
 Swept group delay measurement
 [NASA-CASE-NPO-13909-1] c33 N78-25319
 Quadrature demodulation
 [NASA-CASE-GSC-12137-1] c33 N78-32338
 Bit error rate measurement above and below bit rate tracking threshold
 [NASA-CASE-MSC-12743-1] c32 N79-10263
 Multibeam single frequency synthetic aperture radar processor for imaging separate range swaths
 [NASA-CASE-NPO-14525-1] c32 N79-19195
 Electrochemical detection device --- for use in microbiology
 [NASA-CASE-LAR-11922-1] c25 N79-24073
 Serial data correlator/code translator
 [NASA-CASE-KSC-11025-1] c32 N79-28383
 Scannable beam forming interferometer antenna array system
 [NASA-CASE-GSC-12365-1] c32 N80-28578
 System for plotting subsoil structure and method therefor
 [NASA-CASE-NPO-14191-1] c31 N80-32584
 Interferometric angle monitor
 [NASA-CASE-GSC-12614-1] c35 N81-12386
 Navigation system and method
 [NASA-CASE-GSC-12508-1] c04 N81-26085
 CCD correlated quadruple sampling processor
 [NASA-CASE-NPO-14426-1] c33 N81-27396
 Interleaving device
 [NASA-CASE-GSC-12111-2] c33 N81-29342

SIGNAL RECEPTION

Radar signal receiver arrangement for extending range and increasing signal to noise ratio
 [NASA-CASE-XNP-00748] c07 N70-36911
 Reflectometer for receiver input impedance match measurement
 [NASA-CASE-XNP-10843] c07 N71-11267
 Diversity receiving system with diversity phase lock
 [NASA-CASE-XGS-01222] c10 N71-20841
 Design and development of signal detection and tracking apparatus
 [NASA-CASE-XGS-03502] c10 N71-20852
 Development of optimum pre-detection diversity combining receiving system adapted for use with amplitude modulation, phase modulation, and frequency modulation systems
 [NASA-CASE-XGS-00740] c07 N71-23098
 Binary data decoding device for use at receiving end of communication channel
 [NASA-CASE-NPO-10118] c07 N71-24741
 Development of electronic circuit for combining input signals on two separate antennas to form two processed signals
 [NASA-CASE-MSC-12205-1] c07 N71-27056
 Input signal measurement using liquid crystalline elements
 [NASA-CASE-ERC-10275] c26 N72-25680
 Filter for third order phase locked loops in signal receivers
 [NASA-CASE-NPO-11941-1] c10 N73-27171
 Electromechanical actuator for producing mechanical force and/or motion in response to electrical signals
 [NASA-CASE-NPO-11738-1] c09 N73-30185
 Scan converting video tape recorder
 [NASA-CASE-NPO-10166-2] c35 N76-16391
 Receiving and tracking phase modulated signals
 [NASA-CASE-MSC-16170-2] c32 N81-16338
SIGNAL REFLECTION
 Reflectometer for receiver input impedance match measurement
 [NASA-CASE-XNP-10843] c07 N71-11267
 Reflex feed system for dual frequency antenna with frequency cutoff means
 [NASA-CASE-NPO-14022-1] c32 N78-31321
 Doppler radar having phase modulation of both transmitted and reflected return signals --- ranging
 [NASA-CASE-MSC-18675-1] c32 N81-29312
SIGNAL STABILIZATION
 Linear accelerator frequency control system
 [NASA-CASE-XGS-05441] c10 N71-22962
 Development of apparatus for generating output signal commensurate with information contained in input signal
 [NASA-CASE-ERC-10041] c08 N71-29138
 System for interference signal nulling by polarization adjustment
 [NASA-CASE-NPO-13140-1] c32 N75-24982
 A fiber optic transmission line stabilization apparatus and method
 [NASA-CASE-NPO-15036-1] c74 N80-34250
SIGNAL TO NOISE RATIOS
 Semiconductor in resonant cavity for improving signal to noise ratio of communication receiver
 [NASA-CASE-MSC-12259-1] c07 N70-12616
 Radar signal receiver arrangement for extending range and increasing signal to noise ratio
 [NASA-CASE-XNP-00748] c07 N70-36911
 Detector assembly for discriminating first signal with respect to presence or absence of second signal at time of occurrence of first signal
 [NASA-CASE-XNP-00701] c09 N70-40272
 Automatic estimation of signal to noise ratio and other parameters in signal communication systems
 [NASA-CASE-XNP-05254] c07 N71-20791
 Voltage controlled oscillators and pulse amplitude modulation for signal ratio system
 [NASA-CASE-XNP-04367] c09 N71-23545
 Design and characteristics of recording system for selective reprocessing and filtering of data to obtain optimum signal to noise ratios
 [NASA-CASE-ERC-10112] c07 N72-21119
 Development of idler feedback system to reduce electronic noise problem in two parametric amplifiers

[NASA-CASE-LAR-10253-1] c09 N72-25258
 Superconductive resonant cavity for improved
 signal to noise ratio in communication signal
 [NASA-CASE-MSC-12259-2] c07 N72-33146
 Signal to noise ratio determination circuit
 using bandpass limiter
 [NASA-CASE-GSC-11239-1] c10 N73-25241
 Gated compressor, distortionless signal limiter
 [NASA-CASE-NPO-11820-1] c32 N74-19788

SIGNAL TRANSMISSION

Synchronizing apparatus for multi-access
 satellite time division multiplex system
 [NASA-CASE-XGS-05918] c07 N69-39974
 Electro-mechanical circuit for converting
 floating intelligence signal to common
 electrically grounded intelligence recorder
 [NASA-CASE-XAC-00086] c09 N70-33182
 Demodulator for simultaneous demodulation of two
 modulating ac signal carriers close in frequency
 [NASA-CASE-XMP-01160] c07 N71-11298
 Bipolar phase detector and corrector for split
 phase PCM data signals
 [NASA-CASE-XGS-01590] c07 N71-12392
 Automatic estimation of signal to noise ratio
 and other parameters in signal communication
 systems
 [NASA-CASE-XNP-05254] c07 N71-20791
 Multiplexed communication system design
 including automatic correction of transmission
 errors introduced by frequency spectrum shifts
 [NASA-CASE-XNP-01306] c07 N71-20814
 Adaptive notch filter, using modulation
 techniques for reversed phase noise signal
 [NASA-CASE-XMP-01892] c10 N71-22986
 Pulse generator for synchronizing or resetting
 electronic signals without requiring separate
 external source
 [NASA-CASE-XGS-03632] c09 N71-23311
 Device for locating electrically nonlinear
 objects and determining distance to object by
 FM signal transmission
 [NASA-CASE-KSC-10108] c14 N73-25461
 Television multiplexing system, using single
 crystal controlled clock for signal
 synchronization
 [NASA-CASE-KSC-10654-1] c07 N73-30115
 Controlled oscillator system with a time
 dependent output frequency
 [NASA-CASE-NPO-11962-1] c33 N74-10194
 Pulse code modulated signal synchronizer
 [NASA-CASE-MSC-12462-1] c32 N74-20809
 Pulse code modulated signal synchronizer
 [NASA-CASE-MSC-12494-1] c32 N74-20610
 Digital transmitter for data bus communications
 system
 [NASA-CASE-MSC-14558-1] c32 N75-21486
 Modulator for tone and binary signals --- phase
 of modulation of tone and binary signals on
 carrier waves in communication systems
 [NASA-CASE-GSC-11743-1] c32 N75-24581
 Method and apparatus for background signal
 reduction in opto-acoustic absorption
 measurement
 [NASA-CASE-NPO-13683-1] c35 N77-14411
 Automatic transponder --- measurement of the
 internal delay time of a transponder
 [NASA-CASE-GSC-12075-1] c32 N77-31350
 Fiber optic multiplex optical transmission system
 [NASA-CASE-KSC-11047-1] c74 N78-14889
 Telephone multiline signaling using common
 signal pair
 [NASA-CASE-KSC-11023-1] c32 N79-23310
 Precise RF timing signal distribution to remote
 stations --- fiber optics
 [NASA-CASE-NPO-14749-1] c32 N81-14186
 Digital numerically controlled oscillator
 [NASA-CASE-MSC-16747-1] c33 N81-17349

SIGNATURE ANALYSIS

Multispectral imaging and analysis system ---
 using charge coupled devices and linear arrays
 [NASA-CASE-NPO-13691-1] c43 N79-17288
 Optical signature generating and correlating
 apparatus
 [NASA-CASE-NPO-15226-1] c74 N81-19899

SILANES

Preparation of elastomeric diamine silazane
 polymers
 [NASA-CASE-XMP-04133] c06 N71-20717

Synthesis of high purity dianilinosilanes
 [NASA-CASE-XMP-06409] c06 N71-23230
 Process for preparing high molecular weight
 polyaryloxysilanes from lower molecular weight
 forms
 [NASA-CASE-XMP-08674] c06 N71-28807
 Oxygen post-treatment of plastic surface coated
 with plasma polymerized silicon-containing
 monomers
 [NASA-CASE-ARC-10915-2] c27 N79-18052
 Thermal reactor and process --- liquid silicon
 production from silane
 [NASA-CASE-NPO-14369-1] c25 N80-20338

SILICA GEL

Gels as battery separators for soluble
 electrode cells
 [NASA-CASE-LEW-12364-1] c44 N77-22606

SILICATES

Ultraviolet radiation resistant alkali-metal
 silicate coatings for temperature control of
 spacecraft
 [NASA-CASE-XGS-04119] c18 N69-39979
 Alkali-metal silicate binders and methods of
 manufacture
 [NASA-CASE-GSC-12303-1] c24 N79-31347

SILICIDES

Silicide coating process and composition for
 protection of refractory metals from oxidation
 [NASA-CASE-XLE-10910] c18 N71-29040
 Fused silicide coatings containing discrete
 particles for protecting niobium alloys ---
 used in space shuttle thermal protection
 systems and turbine engine components
 [NASA-CASE-LEW-11179-1] c27 N76-16229

SILICON

Method of forming thin window drifted silicon
 charged particle detector
 [NASA-CASE-XLE-00808] c24 N71-10560
 Gadolinium or samarium doped-silicon
 semiconductor material with resistance to
 radiation damage for use in solar cells
 [NASA-CASE-XLE-10715] c26 N71-23292
 Metal pattern bonding technique for cover glass
 attachment to silicon solar cells for space
 applications
 [NASA-CASE-XLE-08569] c03 N71-23449
 Covered silicon solar cells and method of
 manufacture --- with polymeric films
 [NASA-CASE-LEW-11065-2] c44 N76-14600
 Method of controlling defect orientation in
 silicon crystal ribbon growth
 [NASA-CASE-NPO-13918-1] c76 N79-11920
 Method of purifying metallurgical grade silicon
 employing reduced pressure atmospheric control
 [NASA-CASE-NPO-14474-1] c26 N80-14229
 Method of producing silicon --- gas phase
 reactor multiple injector liquid feed system
 [NASA-CASE-NPO-14382-1] c31 N80-18231
 Thermal reactor and process --- liquid silicon
 production from silane
 [NASA-CASE-NPO-14369-1] c25 N80-20338
 A silicon-slurry/aluminide coating --- protects
 aircraft and land-based gas turbine engines
 [NASA-CASE-LEW-13343-1] c24 N80-26389
 System for slicing silicon wafers
 [NASA-CASE-NPO-14406-1] c37 N80-29703
 A method for producing a solidified body of
 silicon --- solar cells
 [NASA-CASE-NPO-15250-1] c25 N81-16174
 Apparatus for use in the production of
 ribbon-shaped crystals from a silicon melt
 [NASA-CASE-NPO-14297-1] c33 N81-19389
 Electromigration process for the purification of
 molten silicon during crystal growth
 [NASA-CASE-NPO-14831-1] c76 N81-19944

SILICON CARBIDES

Deposition method for epitaxial beta SiC films
 having high degree of crystallographic
 perfection
 [NASA-CASE-ERC-10120] c26 N69-33482
 Producing high purity silicon carbide on carbon
 base by hydrogen reduction of silicon
 tetrachloride
 [NASA-CASE-XLA-00158] c26 N70-36805
 Device for producing high purity silicon carbide
 on carbon base by hydrogen reduction of
 silicon tetrachloride
 [NASA-CASE-XLA-02057] c26 N70-40015

- Process for fabricating SiC semiconductor devices
[NASA-CASE-LEW-12094-1] c76 N76-25049
- Growth of silicon carbide crystals on a seed
while pulling silicon crystals from a melt
[NASA-CASE-NPO-13969-1] c76 N79-23798
- SILICON COMPOUNDS**
- Doping silicon material with gadolinium to
increase radiation resistance of solar cells
[NASA-CASE-XLE-02792] c26 N71-10607
- Process for preparing disilanol with in-chain
perfluoroalkyl groups
[NASA-CASE-MFS-20979-2] c06 N73-32030
- Infusible silazane polymer and process for
producing same --- protective coatings
[NASA-CASE-XMF-02526-1] c27 N79-21190
- SILICON CONTROLLED RECTIFIERS**
- Use of silicon controlled rectifier shorting
circuit to protect thermoelectric generator
source from thermal destruction
[NASA-CASE-XGS-04808] c03 N69-25146
- Silicon controlled rectifier inverter with
compensation of transients to avoid false gating
[NASA-CASE-XLA-08507] c09 N69-39584
- Reversible ring counter using cascaded single
silicon controlled rectifier stages
[NASA-CASE-XGS-01473] c09 N71-10673
- Silicon controlled rectifier pulse gate
amplifier for blocking false gating caused by
negative transient voltages
[NASA-CASE-XLA-07497] c09 N71-12514
- SILICON DIOXIDE**
- Intermittent type silica gel adsorption
refrigerator for providing temperature control
for spacecraft components
[NASA-CASE-XNP-00920] c15 N71-15906
- Nose cone mounted heat resistant antenna
comprising plurality of adjacent layers of
silica not introducing paths of high thermal
conductivity through ablative shield
[NASA-CASE-XMS-04312] c07 N71-22584
- Method and apparatus for stable silicon dioxide
layers on silicon grown in silicon nitride
ambient
[NASA-CASE-ERC-10073-1] c24 N74-19769
- Silica reusable surface insulation
[NASA-CASE-ARC-10721-1] c27 N76-22376
- Two-component ceramic coating for silica
insulation
[NASA-CASE-MSC-14270-1] c27 N76-22377
- Transmitting and reflecting diffuser --- using
ultraviolet grade fused silica coatings
[NASA-CASE-LAR-10385-3] c74 N78-15879
- Field effect transistor and method of
construction thereof
[NASA-CASE-MFS-23312-1] c33 N78-27326
- Fibrous refractory composite insulation ---
shielding reusable spacecraft
[NASA-CASE-ARC-11169-1] c24 N79-24062
- Improved attachment system for silica tiles ---
thermal protection for space shuttle orbiter
[NASA-CASE-MSC-18741-1] c16 N81-16110
- Apparatus and method for heating a material in a
transparent ampoule --- crystal growth
[NASA-CASE-MFS-25436-1] c76 N81-30012
- SILICON FILMS**
- Deposition method for epitaxial beta SiC films
having high degree of crystallographic
perfection
[NASA-CASE-ERC-10120] c26 N69-33482
- Pyroelectric detector arrays
[NASA-CASE-LAR-12363-1] c35 N81-12389
- SILICON JUNCTIONS**
- Improving radiation resistance of silicon
semiconductor junctions by doping with lithium
[NASA-CASE-XGS-07801] c09 N71-12513
- SILICON NITRIDES**
- Method and apparatus for stable silicon dioxide
layers on silicon grown in silicon nitride
ambient
[NASA-CASE-ERC-10073-1] c24 N74-19769
- Silicon nitride coated, plastic covered solar cell
[NASA-CASE-LEW-11496-1] c44 N77-14580
- Sandblasting nozzle
[NASA-CASE-NPO-13823-1] c37 N81-25371
- SILICON OXIDES**
- Three-component ceramic coating for silica
insulation
[NASA-CASE-MSC-14270-2] c27 N76-23426
- SILICON POLYMERS**
- Oxygen post-treatment of plastic surface coated
with plasma polymerized silicon-containing
monomers
[NASA-CASE-ARC-10915-2] c27 N79-18052
- SILICON RADIATION DETECTORS**
- Lithium drifted silicon radiation detector with
gold rectifying contacts
[NASA-CASE-XLE-10529] c14 N69-23191
- Silicon radiation detecting probe design for in
vivo biomedical use
[NASA-CASE-XMS-01177] c05 N71-19440
- SILICON TRANSISTORS**
- Vapor deposition method for forming metallized
tungsten contacts on silicon substrates
[NASA-CASE-GSC-10695-1] c09 N72-25259
- Development of method and apparatus for
detecting surface ions on silicon diodes and
transistors
[NASA-CASE-ERC-10325] c15 N72-25457
- SILICONES**
- Vacuum pressure molding technique
[NASA-CASE-LAR-10073-1] c37 N76-24575
- SILICONES**
- Silicone containing solid propellant
[NASA-CASE-NPO-14477-1] c28 N80-28536
- SILICONIZING**
- Vapor deposited laminated nitride-silicon
coating for corrosion prevention of
carbonaceous surfaces
[NASA-CASE-XLA-00284] c15 N71-16075
- SILOXANES**
- Synthesis of siloxane containing epoxy polymers
with low dielectric properties
[NASA-CASE-MFS-13994-1] c06 N71-11240
- Method for producing alternating ether-siloxane
copolymers with stable properties when exposed
to elevated temperatures and UV radiation
[NASA-CASE-XMF-02584] c06 N71-20905
- Synthesis of siloxane containing epoxide and
diamine polymers
[NASA-CASE-MFS-13994-2] c06 N72-25148
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- SOLAR ELECTRIC PROPULSION**
- Closed loop solar array-ion thruster system with power control circuitry
[NASA-CASE-LEW-12780-1] c20 N79-20179
- SOLAR ENERGY**
- Rectangular solar cell stacked panels to generate electrical power aboard spacecraft
[NASA-CASE-NFO-11771] c03 N73-20040
- Solar energy power system --- using Freon
[NASA-CASE-MFS-21628-1] c44 N75-32581
- Thermostatically controlled non-tracking type solar energy concentrator
[NASA-CASE-NFO-13497-1] c44 N76-14602
- Solar photolysis of water
[NASA-CASE-NPO-13675-1] c44 N77-32580
- Three-dimensional tracking solar energy concentrator and method for making same
[NASA-CASE-NPO-13736-1] c44 N77-32583
- Solar heating system
[NASA-CASE-LAR-12009-1] c44 N78-15560
- Method for producing solar energy panels by automation
[NASA-CASE-LEW-12541-1] c44 N78-25529
- Method for making an aluminum or copper substrate panel for selective absorption of solar energy
[NASA-CASE-MFS-23518-1] c44 N79-11469
- Primary reflector for solar energy collection systems
[NASA-CASE-NPO-13579-4] c44 N79-14529
- Method of construction of a multi-cell solar array
[NASA-CASE-MFS-23540-1] c44 N79-26475
- Solar cell module
[NASA-CASE-NPO-14467-1] c44 N79-31753
- Solar-heated fluidized bed gasification system
[NASA-CASE-NFO-15071-1] c44 N80-24747
- SOLAR ENERGY ABSORBERS**
- Panel for selectively absorbing solar thermal energy and the method of producing said panel
[NASA-CASE-MFS-22562-1] c44 N76-14595
- Solar energy absorber
[NASA-CASE-MFS-22743-1] c44 N76-22657
- Solar energy trap
[NASA-CASE-MFS-22744-1] c44 N76-24696
- Solar cell shingle
[NASA-CASE-LEW-12587-1] c44 N77-31601
- Stainless steel panel for selective absorption of solar energy and the method of producing said panel
[NASA-CASE-MFS-23518-2] c44 N77-31611
- Low cost solar energy collection system
[NASA-CASE-NPO-13579-1] c44 N78-17460
- Electromagnetic radiation energy arrangement --- coatings for solar energy absorption and infrared reflection
[NASA-CASE-WOO-00428-1] c32 N79-19186
- Aluminum or copper substrate panel for selective absorption of solar energy
[NASA-CASE-MFS-23518-3] c44 N80-16452
- Method for depositing an oxide coating --- producing solar panels
[NASA-CASE-LEW-13131-1] c26 N81-24230
- A stable density-stratification solar pond
[NASA-CASE-NPO-15419-1] c44 N81-27599
- SOLAR ENERGY CONVERSION**
- Solar energy power system
[NASA-CASE-MFS-21628-2] c44 N76-23675
- High voltage, high current Schottky barrier solar cell
[NASA-CASE-NPO-13482-1] c44 N78-13526
- Process for utilizing low-cost graphite substrates for polycrystalline solar cells
[NASA-CASE-GSC-12022-2] c44 N78-24609
- Solar photolysis of water
[NASA-CASE-NPO-14126-1] c44 N79-11470
- Thermal energy transformer
[NASA-CASE-NPO-14058-1] c44 N79-18443
- Solar engine --- Flat plate type
[NASA-CASE-LAR-12148-1] c44 N79-29608
- Solar concentrator
[NASA-CASE-MFS-23727-1] c44 N80-14473
- Copper doped polycrystalline silicon solar cell
[NASA-CASE-NFO-14670-1] c44 N81-19558
- Solar driven liquid metal MHD power generator
[NASA-CASE-LAR-12495-1] c44 N81-32609
- SOLAR FURNACES**
- Lens assembly for solar furnace or solar simulator
[NASA-CASE-XNP-04111] c14 N71-15622
- SOLAR GENERATORS**
- Describing method for vapor deposition of gallium arsenide films to manganese substrates

- to provide semiconductor devices with low resistance substrates
[NASA-CASE-XNP-01328] c26 N71-18064
- Microwave power converter
[NASA-CASE-NPO-14068-1] c44 N78-19609
- SOLAR GRAVITATION**
Table structure and rotating magnet system simulating gravitational forces on spacecraft and displaying trajectories between Earth, Venus, and Mercury
[NASA-CASE-XNP-00708] c14 N70-35394
- SOLAR HEATING**
Portable linear-focused solar thermal energy collecting system
[NASA-CASE-NPO-13734-1] c44 N78-10554
Solar heating system
[NASA-CASE-LAR-12009-1] c44 N78-15560
Solar energy control system
[NASA-CASE-MFS-25287-1] c44 N80-17544
Combined solar collector and energy storage system
[NASA-CASE-LAR-12205-1] c44 N80-20810
- SOLAR OBSERVATORIES**
Light sensitive control system for automatically opening and closing dome of solar optical telescope
[NASA-CASE-MSC-10966] c14 N71-19568
- SOLAR PONDS (HEAT STORAGE)**
Solar pond
[NASA-CASE-NPO-13581-2] c44 N78-31525
A stable density-stratification solar pond
[NASA-CASE-NPO-15419-1] c44 N81-27599
- SOLAR POSITION**
Sun angle calculator
[NASA-CASE-MSC-12617-1] c35 N76-29552
Solar tracking system
[NASA-CASE-MFS-23999-1] c44 N81-24520
- SOLAR POWERED AIRCRAFT**
Solar powered aircraft
[NASA-CASE-LAR-12615-1] c05 N81-32138
- SOLAR RADIATION**
Space simulator with uniform test region radiation distribution, adapted to simulate Venus solar radiations
[NASA-CASE-XNP-00459] c11 N70-38675
Design and characteristics of device for sensing solar radiation and providing spacecraft attitude control to maintain direction with respect to incident radiation
[NASA-CASE-XNP-05535] c14 N71-23040
Utilization of solar radiation by solar still for converting salt and brackish water into potable water
[NASA-CASE-XMS-04533] c15 N71-23086
Wide angle sun sensor --- consisting of cylinder, insulation and pair of detectors
[NASA-CASE-NPO-13327-1] c35 N75-23910
Particulate and solar radiation stable coating for spacecraft
[NASA-CASE-LAR-10805-2] c34 N77-18382
- SOLAR RADIO EMISSION**
System generating sidereal frequency signals from signals of standard solar frequency without use of mixing operations or feedback loops
[NASA-CASE-XGS-02610] c14 N71-23174
- SOLAR REFLECTORS**
Foldable, double cone and parabolic reflector system for solar ray concentration
[NASA-CASE-XLA-04622] c03 N70-41580
Modifying existing solar cells for temperature control
[NASA-CASE-NPO-10109] c03 N71-11049
Fabrication of curved reflector segments for solar mirror
[NASA-CASE-XLE-08917] c15 N71-15597
Thermal pump-compressor for converting solar energy
[NASA-CASE-XLA-00377] c33 N71-17610
Forming mold for polishing and machining curved solar magnesium reflector with reinforcing ribs
[NASA-CASE-XLE-08917-2] c15 N71-24836
Inorganic thermal control and solar reflector coatings
[NASA-CASE-MFS-20011] c18 N72-22566
Lightweight reflector assembly
[NASA-CASE-NPO-13707-1] c74 N77-28533
Primary reflector for solar energy collection systems
[NASA-CASE-NPO-13579-4] c44 N79-14529
- Primary reflector for solar energy collection systems and method of making same
[NASA-CASE-NPO-13579-3] c44 N79-24432
Solar energy collection system
[NASA-CASE-NPO-13579-2] c44 N79-24433
- SOLAR SAILS**
Strong thin membrane structure --- solar sails
[NASA-CASE-NPO-14021-2] c27 N80-16163
Speed control device for a heavy duty shaft --- solar sails for spacecraft propulsion
[NASA-CASE-NPO-14170-1] c37 N81-15364
- SOLAR SENSORS**
Sensor consisting of photocells mounted on pyramidal base for improved pointing accuracy of planetary trackers
[NASA-CASE-XNP-04180] c07 N69-39736
Spacecraft attitude control system using solar and earth sensors, gyroscopes, and jet actuators
[NASA-CASE-XNP-00465] c21 N70-35395
Sun tracker with rotatable plane-parallel plate and two photocells
[NASA-CASE-XGS-01159] c21 N71-10678
Solar sensor with coarse and fine sensing elements for matching preirradiated cells on degradation rates
[NASA-CASE-XLA-01584] c14 N71-23269
Sun direction detection system
[NASA-CASE-NPO-13722-1] c74 N77-22951
Sun tracking solar energy collector
[NASA-CASE-NPO-13921-1] c44 N79-14526
Improved Sun-sensing guidance system for high-altitude aircraft
[NASA-CASE-FRC-11052-1] c04 N80-20249
Solar tracking system
[NASA-CASE-MFS-23999-1] c44 N81-24520
- SOLAR SIMULATORS**
Lens assembly for solar furnace or solar simulator
[NASA-CASE-XNP-04111] c14 N71-15622
High powered arc electrodes --- producing solar simulator radiation
[NASA-CASE-LEW-11162-1] c33 N74-12913
- SOLDERED JOINTS**
Soldering device particularly suited to making high quality wiring joints for aerospace engineering utilizing capillary attraction to regulate flow of solder
[NASA-CASE-XLA-08911] c15 N71-27214
- SOLDERING**
Hydrazine monoperfluoro alkanoate solder flux leaving corrosion resistant coating, for metals such as copper
[NASA-CASE-XNP-03459-2] c18 N71-15688
Metal soldering with hydrazine monoperfluoro alkanoate for corrosion resistant coatings
[NASA-CASE-XNP-03459] c15 N71-21078
Method of plating copper on aluminum to permit conventional soldering of structural aluminum bodies
[NASA-CASE-XLA-08966-1] c17 N71-25903
Device for resistance soldering electrical leads to solder cups of multiple terminal block
[NASA-CASE-GSC-10913] c15 N72-22491
Development of electrical system for indicating optimum contact between electrode and metal surface to permit improved soldering operation
[NASA-CASE-KSC-10242] c15 N72-23497
Bonding machine for forming a solar array strip
[NASA-CASE-NPO-13652-2] c44 N79-24431
- SOLDERS**
Solder coating process for printed copper circuit protection
[NASA-CASE-XNP-01599] c09 N71-20705
Method for attaching a fused-quartz mirror to a conductive metal substrate
[NASA-CASE-MFS-23405-1] c26 N77-29260
- SOLENOID VALVES**
Solenoid two-step valve for bipropellant flow rate control to rocket engine
[NASA-CASE-XMS-04890-1] c15 N70-22192
Automatic recording McLeod gage with three electrodes and solenoid valve connection
[NASA-CASE-XLE-03280] c14 N71-23093
Solenoid valve including guide for armature and valve member
[NASA-CASE-GSC-10607-1] c15 N72-20442
Remote fire stack igniter --- with solenoid-controlled valve
[NASA-CASE-MFS-21675-1] c25 N74-33378

- Automatically operable self-leveling load table
[NASA-CASE-MFS-22039-1] c09 N75-12968
- SOLENOIDS**
- Water cooled solenoid capable of producing magnetic field intensities up to 100 kilogauss
[NASA-CASE-XNP-01951] c09 N70-41529
- Automatic power supply circuit design for driving inductive loads and minimizing power consumption including solenoid example
[NASA-CASE-NPO-10716] c09 N71-24892
- Rotary solenoid shutter drive assembly and rotary inertia damper and stop plate assembly --- for use with cameras mounted in satellites
[NASA-CASE-GSC-11560-1] c33 N74-20861
- Sprag solenoid brake --- development and operations of electrically controlled brake
[NASA-CASE-MFS-21846-1] c37 N74-26976
- SOLID ELECTRODES**
- Polymeric electrolytic hygrometer
[NASA-CASE-NPO-13948-1] c35 N78-25391
- SOLID LUBRICANTS**
- Bonded solid lubricant coatings of calcium fluoride and binder for high temperature stability
[NASA-CASE-XMS-00259] c18 N70-36400
- Solid lubricant applied to porous roller bearings prior to use in ultrahigh vacuum
[NASA-CASE-XLE-09527] c15 N71-17688
- Preparation of inorganic solid film lubricants with long wear life and stability in aerospace environments
[NASA-CASE-XMF-03988] c15 N71-21403
- Development of rolling element bearing for operation in ultrahigh vacuum environment
[NASA-CASE-XLE-09527-2] c15 N71-26189
- Method of making bearing materials --- self-lubricating, oxidation resistant composites for high temperature applications
[NASA-CASE-LEW-11930-4] c24 N79-17516
- SOLID PHASES**
- An improved solid electrolyte cell
[NASA-CASE-NPO-15269-1] c33 N81-16385
- SOLID PROPELLANT IGNITION**
- Solid propellant ignition with hypergolic fluid injected to predetermined portions of propellant
[NASA-CASE-XLE-00207] c28 N70-33375
- Method for igniting solid propellant rocket motors by injecting hypergolic fluids
[NASA-CASE-XLE-01988] c27 N71-15634
- Molded composite pyrogen igniter for rocket motors --- solid propellant ignition
[NASA-CASE-LAR-12018-1] c20 N78-24275
- SOLID PROPELLANT ROCKET ENGINES**
- Spherical solid propellant rocket engine design
[NASA-CASE-XLA-00105] c28 N70-33331
- Mandrel for shaping solid propellant rocket fuel into engine casing
[NASA-CASE-XLA-00304] c27 N70-34783
- Spherical solid propellant rocket engine having abrupt burnout
[NASA-CASE-XHQ-01897] c28 N70-35381
- Grain configuration for solid propellant rocket engines
[NASA-CASE-XGS-03556] c27 N70-35534
- Solid propellant rocket vehicle thrust control method and apparatus
[NASA-CASE-XNP-00217] c28 N70-38181
- Steerable solid propellant rocket motor adapted to effect payload orientation as multistage rocket stage or reduce velocity as retrorocket
[NASA-CASE-XNP-00234] c28 N70-38645
- Method of making solid propellant rocket motor having reliable high altitude capabilities, long shelf life, and capable of firing with nozzle closure with foamed plastic permanent mandrel
[NASA-CASE-XLA-04126] c28 N71-26779
- Electrical failure detector in solid rocket propellant motor insulation against thermal degradation by fuel grain
[NASA-CASE-XMF-03968] c14 N71-27186
- Solid propellant rocket engine with venting system to control effective nozzle throat area
[NASA-CASE-XNP-03282] c28 N72-20758
- Thin walled nozzle with insulative nonablative coating for solid propellant rocket engines
[NASA-CASE-NPO-11458] c28 N72-23610
- Characteristics of solid propellant rocket engine with controlled rate of thrust buildup operating in vacuum environment
[NASA-CASE-NPO-11559] c28 N73-24784
- Space vehicle
[NASA-CASE-MFS-22734-1] c18 N75-19329
- Solid propellant rocket motor and method of making same
[NASA-CASE-XLA-1349] c20 N77-17143
- Molded composite pyrogen igniter for rocket motors --- solid propellant ignition
[NASA-CASE-LAR-12018-1] c20 N78-24275
- Solid propellant motor
[NASA-CASE-NPO-11458A] c20 N78-32179
- SOLID PROPELLANTS**
- Variable thrust ion engine using thermal decomposition of solid cesium compound to produce propulsive vapor
[NASA-CASE-XMF-00923] c28 N70-36802
- Photographic method for measuring viscoelastic strain in solid propellants and other materials
[NASA-CASE-XNP-01153] c32 N71-17645
- Ethylene oxide sterilization and encapsulating process for sterile preservation of instruments and solid propellants
[NASA-CASE-XNP-09763] c14 N71-20461
- Chemical process for production of polyisobutylene compounds and application as solid rocket propellant binder
[NASA-CASE-NFO-10893] c27 N73-22710
- A system for concurrently delivering a stream of powdered fuel and a stream of powdered oxidizer to a combustion chamber for a reaction motor
[NASA-CASE-MFS-23904-1] c20 N79-13077
- SOLID ROCKET BINDERS**
- Liner for hybrid solid propellants to bind propellant to rocket motor case
[NASA-CASE-XNP-09744] c27 N71-16392
- Silicone containing solid propellant
[NASA-CASE-NFO-14477-1] c28 N80-28536
- SOLID ROCKET PROPELLANTS**
- Using ethylene oxide in preparation of sterilized solid rocket propellants and encapsulating materials
[NASA-CASE-XNP-01749] c27 N70-41897
- Pressurized gas injection for burning rate control of solid propellants
[NASA-CASE-XLE-03494] c27 N71-21819
- Solid propellant stabilizer containing nitroguanidine
[NASA-CASE-NFO-12000] c27 N72-25699
- Solid propellant containing hydrazinium nitroformate oxidizer and polymeric hydrocarbon binder
[NASA-CASE-NFO-12015] c27 N73-16764
- Preparing oxidizer coated metal fuel particles
[NASA-CASE-NFO-11975-1] c28 N74-33209
- Casting propellant in rocket engine
[NASA-CASE-LAR-11995-1] c28 N77-10213
- Solid propellant rocket motor and method of making same
[NASA-CASE-XLA-1349] c20 N77-17143
- High performance ammonium nitrate propellant
[NASA-CASE-NFO-14260-1] c28 N79-28342
- Process for the leaching of AP from propellant
[NASA-CASE-NFO-14109-1] c28 N80-23471
- Silicone containing solid propellant
[NASA-CASE-NFO-14477-1] c28 N80-28536
- SOLID STATE**
- Solid state chemical source for ammonia beam masers
[NASA-CASE-XGS-01504] c16 N70-41578
- SOLID STATE DEVICES**
- Solid state switching circuit design to increase current capacity of low rated relay contacts
[NASA-CASE-XNP-09228] c09 N69-27500
- Temperature compensated solid state differential amplifier with application in bioinstrumentation circuits
[NASA-CASE-XAC-00435] c09 N70-35440
- Solid state operational integrator
[NASA-CASE-NPO-10230] c09 N71-12520
- Microwave power receiving antenna solving heat dissipation problems by construction of elements as heat pipe devices
[NASA-CASE-MFS-20333] c09 N71-13486
- Computer circuit performing both counting and shifting logic operations also capable of miniaturization and integration in basic circuits

[NASA-CASE-XNP-01753] c08 N71-22897
Solid state television camera system consisting of monolithic semiconductor mosaic sensor and molecular digital readout systems
[NASA-CASE-XNP-06092] c07 N71-24612
Solid state circuit for switching alternating current input signal as function of direct current gating transistor
[NASA-CASE-XNP-06505] c10 N71-24799
Solid state force measuring electromechanical transducers made of piezoresistive materials
[NASA-CASE-ERC-10088] c26 N71-25490
Development and characteristics of solid state acoustic variable time delay line using direct current voltage and radio frequency pulses
[NASA-CASE-ERC-1C032] c10 N71-25900
Solid state broadband stable power amplifier
[NASA-CASE-XNP-10854] c10 N71-26331
Solid state remote circuit selector switching circuit
[NASA-CASE-LEW-10387] c09 N72-22201
Radio frequency controlled solid state switch
[NASA-CASE-ARC-10136-1] c09 N72-22202
Development of thermal to electric power conversion system using solid state switches of electrical currents to load for Seebeck effect compensation
[NASA-CASE-NPO-11388] c03 N72-23048
Solid state switch for variable circuit switching
[NASA-CASE-NPO-10817-1] c08 N73-30135
Full wave modulator-demodulator amplifier apparatus --- for generating rectified output signal
[NASA-CASE-FRC-10072-1] c33 N74-14939
Traveling wave solid state amplifier utilizing a semiconductor with negative differential mobility
[NASA-CASE-HQN-10069] c33 N75-27251
Solid-state current transformer
[NASA-CASE-NFS-22560-1] c33 N77-14335
Space-charge-limited solid-state triode
[NASA-CASE-NPO-13064-1] c33 N79-11314
Control means for a solid state crossbar switch
[NASA-CASE-NPO-15066-1] c33 N80-33679
Optical crystal temperature gauge with fiber optic connections --- cryogenic systems
[NASA-CASE-MSC-18627-1] c74 N81-15818
SOLID SURFACES
Dye penetrant and technique for nondestructive tests of solid surfaces contacted by liquid oxygen
[NASA-CASE-XNP-02221] c18 N71-27170
SOLID WASTES
Process of forming catalytic surfaces for wet oxidation reactions
[NASA-CASE-MSC-14831-1] c25 N78-10225
SOLID-SOLID INTERFACES
Coal-shale interface detection
[NASA-CASE-NFS-23720-3] c43 N79-25443
Coal-rock interface detector
[NASA-CASE-NFS-23725-1] c43 N79-31706
SOLIDIFICATION
A method for producing a solidified body of silicon --- solar cells
[NASA-CASE-NPO-15250-1] c25 N81-16174
Containerless melting and rapid solidification apparatus and method
[NASA-CASE-NFS-25305-1] c35 N81-16427
Method and apparatus for supercooling and solidifying substances --- containerless melts and space processing
[NASA-CASE-NFS-25242-1] c35 N81-24413
SOLUBILITY
Fireproof potassium silicate coating composition, insoluble in water after application
[NASA-CASE-GSC-10072] c18 N71-14014
Formulated plastic separators for soluble electrode cells
[NASA-CASE-LEW-12358-2] c25 N78-25149
Insoluble polyelectrolyte and ion-exchange hollow fiber impregnated therewith
[NASA-CASE-NPO-13530-1] c25 N81-17187
SOLUTES
Specific wavelength colorimeter --- for measuring given solute concentration in test sample
[NASA-CASE-MSC-14081-1] c35 N74-27860

SOLUTIONS

Asymmetric polyimide separation membrane and method
[NASA-CASE-NPO-15431-1] c25 N81-29178

SOLVENT EXTRACTION

Recovery of aluminum from composite propellants
[NASA-CASE-NPO-14110-1] c28 N81-15119

SOLVENTS

Coal desulfurization --- using iron pentacarbonyl
[NASA-CASE-NPO-14272-1] c25 N81-33246

SONAR

Echo tracker/range finder for radars and sonars
[NASA-CASE-NFO-14361-1] c32 N79-26253
Method for shaping and aiming narrow beams --- using a linear frequency chirp for sonar reception
[NASA-CASE-NPO-14632-1] c32 N80-12256

SONIC BOOMS

Instrumentation for measurement of aircraft noise and sonic boom
[NASA-CASE-LAR-11173-1] c35 N75-19614
Instrumentation for measuring aircraft noise and sonic boom
[NASA-CASE-LAR-11476-1] c07 N76-27232

SORBATES

Apparatus for measuring a sorbate dispersed in a fluid stream
[NASA-CASE-ARC-10896-1] c35 N78-19465

SORET COEFFICIENT

Method of growing composites of the type exhibiting the Soret effect --- improved structure of eutectic alloy crystals
[NASA-CASE-NFS-22926-1] c24 N77-27187

SOUND FIELDS

Multiple pure tone elimination strut assembly
[NASA-CASE-FRC-11062-1] c07 N80-32393

SOUND GENERATORS

Ejectable underwater sound source recovery assembly
[NASA-CASE-LAR-10595-1] c35 N74-16135

SOUND LOCALIZATION

Resolution enhanced sound detecting apparatus
[NASA-CASE-NFO-14134-1] c71 N79-23753

SOUND PRESSURE

Instrumentation for measurement of aircraft noise and sonic boom
[NASA-CASE-LAR-11173-1] c35 N75-19614
Differential sound level meter
[NASA-CASE-LAR-12106-1] c71 N78-14867

SOUND PROPAGATION

System for plotting subsoil structure and method therefor
[NASA-CASE-NFO-14191-1] c31 N80-32584

SOUND TRANSDUCERS

Method and transducer device for detecting presence of hydrogen gas
[NASA-CASE-XNP-03873] c06 N69-39733
Sensor for detecting and measuring energy, velocity and direction of travel of a cosmic dust particle
[NASA-CASE-GSC-10503-1] c14 N72-20381
Resolution enhanced sound detecting apparatus
[NASA-CASE-NFO-14134-1] c71 N79-23753
Pulse transducer with artifact signal attenuator --- heart rate sensors
[NASA-CASE-FRC-11012-1] c52 N80-23969

SOUND WAVES

Piezoelectric transducer for monitoring sound waves of physiological origin
[NASA-CASE-XMS-05365] c14 N71-22993
Material suspension within an acoustically excited resonant chamber --- at near weightless conditions
[NASA-CASE-NPO-13263-1] c12 N75-24774
Acoustic energy shaping
[NASA-CASE-NFO-13802-1] c71 N78-10837
Acoustic driving of rotor
[NASA-CASE-NFO-14005-1] c71 N79-20827
Acoustic suspension system
[NASA-CASE-NFO-15435-1] c71 N81-27887

SOUNDING ROCKETS

Development of attitude control system for sounding rocket stabilization during ballistic phase of flight
[NASA-CASE-XGS-01654] c31 N71-24750
System for deploying and ejecting releasable clamsell fairing sections from spinning sounding rockets
[NASA-CASE-GSC-10590-1] c31 N73-14853

SPACE CAPSULES

Assembly for opening flight capsule stabilizing and decelerating flaps with reference to capsule recovery
[NASA-CASE-XMF-00641] c31 N70-36410
Design and configuration of manned space capsule
[NASA-CASE-XLA-01332] c31 N71-15664
Describing assembly for opening stabilizing and decelerating flaps of flight capsules used in space research
[NASA-CASE-XMF-03169] c31 N71-15675

SPACE CHARGE

Space-charge-limited solid-state triode
[NASA-CASE-NPO-13064-1] c33 N79-11314

SPACE COMMUNICATION

Radio receiver with array of independently steerable antennas for deep space communication
[NASA-CASE-XLA-00901] c07 N71-10775
Design and development of tracking receiver for tracking satellites and receiving radio signal transmissions under adverse noise conditions
[NASA-CASE-XGS-08679] c10 N71-21473
Development of antenna system for spin stabilized communication satellite for simultaneous reception and transmission of data
[NASA-CASE-XGS-02607] c31 N71-23009
Space communication system for compressed data with a concatenated Reed-Solomon-Viterbi coding channel
[NASA-CASE-NPO-13545-1] c32 N77-12240

SPACE ENVIRONMENT SIMULATION

Simulating voltage-current characteristic curves of solar cell panel with different operational parameters
[NASA-CASE-XMS-01554] c10 N71-10578
Method and feed system for separating and orienting liquid and vapor phases of liquid propellants in zero gravity environment
[NASA-CASE-XLE-01182] c27 N71-15635
Cable suspension and inclined walkway system for simulating reduced or zero gravity environments
[NASA-CASE-XLA-01787] c11 N71-16028
Space environment simulation system for measuring spacecraft electric field strength in plasma sheath
[NASA-CASE-XLE-02038] c09 N71-16086
Optical characteristics measuring apparatus
[NASA-CASE-XNP-08840] c23 N71-16365
Omnidirectional anisotropic molecular trap, used with vacuum pump to simulate space environments for testing spacecraft components
[NASA-CASE-XGS-00783] c30 N71-17788
Space environmental work simulator with portions of space suit mounted to vacuum chamber wall
[NASA-CASE-XMF-07488] c11 N71-18773
Low and zero gravity simulator for astronaut training
[NASA-CASE-MFS-10555] c11 N71-19494

Self lubricating fluoride-metal composite materials for outer space applications
[NASA-CASE-XLE-08511] c18 N71-23710

Test chamber for determining decomposition and autoignition of materials used in spacecraft under controlled environmental conditions
[NASA-CASE-KSC-10198] c11 N71-28629

Illumination system design for use as sunlight simulator in space environment simulators with multiple light sources reflected to single virtual source
[NASA-CASE-HQN-10781] c23 N71-30292

Pressure regulator for space suit worn underwater to simulate space environment for testing and experimentation
[NASA-CASE-MFS-20332] c05 N72-20097

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Self-erectable space structures of flexible foam for application in planetary orbits
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Manned space station collapsible for launching and self-erectable in orbit
[NASA-CASE-XLA-00678] c31 N70-34296
Manned space station launched in packaged condition and self erecting in orbit
[NASA-CASE-XLA-00258] c31 N70-38676
Collapsible, space erectable loop antenna system for space vehicle
[NASA-CASE-XMF-00437] c07 N70-40202
Erectable, inflatable, radio signal reflecting passive communication satellite

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Deployment system for flexible wing with rigid superstructure
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Capillary radiator for carrying heat transfer liquid in planetary spacecraft structures
[NASA-CASE-XLE-03307] c33 N71-14035

Describing apparatus for manufacturing operations in low and zero gravity environments of orbital space flight
[NASA-CASE-MFS-20410] c15 N71-19214

Space erectable rollout solar array of arcuate solar panels furled on tapered drum for spacecraft storage during launch
[NASA-CASE-NPO-10188] c03 N71-20273

Self erecting parabolic reflector design for use in space
[NASA-CASE-XMS-03454] c09 N71-20658

Pneumatic cantilever beams and platform for space erectable structure
[NASA-CASE-XLA-01731] c32 N71-21045

Hydraulic actuator design for space deployment of heat radiators
[NASA-CASE-MSC-11817-1] c15 N71-26611

Space expandable tether device for use as passageway between two docked spacecraft
[NASA-CASE-XMS-10993] c15 N71-28936

Expandable space frames with high expansion to collapse ratio
[NASA-CASE-ERC-10365-1] c31 N73-32749

Apparatus for assembling space structure
[NASA-CASE-MFS-23579-1] c18 N79-11108

Lightweight structural columns --- space erectable trusses
[NASA-CASE-LAR-12095-1] c31 N81-25258

Telescoping columns --- parabolic antenna support
[NASA-CASE-LAR-12195-1] c31 N81-27324

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Self-propelled vehicle with wheel, track laying, and walking capability for exploratory exploration
[NASA-CASE-NPO-11366] c11 N73-26238

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Portable environmental control and life support system for astronaut in and out of spacecraft
[NASA-CASE-XMS-09632-1] c05 N71-11203

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[NASA-CASE-XMS-09653] c54 N78-17680

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Apparatus for assembling space structure
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System for removing and repairing spacecraft control thrusters by use of portable air locks
[NASA-CASE-MFS-20325] c28 N71-27095

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[NASA-CASE-NPO-13263-1] c12 N75-24774

Method for manufacturing mirrors in zero gravity environment
[NASA-CASE-MSC-12611-1] c12 N76-15189

Apparatus for assembling space structure
[NASA-CASE-MFS-23579-1] c18 N79-11108

Structural members, method and apparatus
[NASA-CASE-MSC-16217-1] c31 N81-27323

SPACE MISSIONS

Planetary atmospheric investigation using split trajectory dual flyby mode
[NASA-CASE-XAC-08494] c30 N71-15990

Elimination of tracking occultation problems occurring during continuous monitoring of interplanetary missions by using Earth orbiting communications satellite
[NASA-CASE-XAC-06029-1] c31 N71-24813

Design and development of space shuttle system for delivering payload to earth orbit or celestial orbit
[NASA-CASE-MSC-12391] c30 N73-12884

SPACE NAVIGATION

Electrical and electromechanical trigonometric computation assembly and space vehicle guidance system for aligning perpendicular axes of two sets of three-axes coordinate

- references
[NASA-CASE-XMF-006E4] c21 N71-21688
Momentum wheel design for spacecraft attitude control and magnetic drum and head system for data storage
[NASA-CASE-NPO-11481] c21 N73-13644
Method for producing reticles for use in outer space
[NASA-CASE-GSC-11188-2] c21 N73-19630
- SPACE ORIENTATION**
Sensing method and device for determining orientation of space vehicle or satellite by using particle traps
[NASA-CASE-XGS-00466] c21 N70-34297
- SPACE PROCESSING**
Method and apparatus for supercooling and solidifying substances --- containess melts and space processing
[NASA-CASE-MFS-25242-1] c35 N81-24413
- SPACE RENDEZVOUS**
Method and apparatus for connecting two spacecraft with probe of one inserted in rocket engine nozzle of other spacecraft
[NASA-CASE-MFS-11133] c31 N71-16222
- SPACE SHUTTLE ORBITERS**
Improved attachment system for silica tiles --- thermal protection for space shuttle orbiter
[NASA-CASE-MSC-18741-1] c16 N81-16110
- SPACE SHUTTLES**
Designing spacecraft for flight into space, atmospheric reentry, and landing at selected sites
[NASA-CASE-XAC-02058] c02 N71-16C87
Design and development of space shuttle system for delivering payload to earth orbit or celestial orbit
[NASA-CASE-MSC-12391] c30 N73-12884
Spacecraft configurations and aerodynamic characteristics of space shuttle systems with two reusable stages
[NASA-CASE-MSC-12433] c31 N73-14E54
Variable ratio mixed-mode bilateral master-slave control system for shuttle remote manipulator system
[NASA-CASE-MSC-14245-1] c18 N75-27041
Fused silicide coatings containing discrete particles for protecting niobium alloys --- used in space shuttle thermal protection systems and turbine engine components
[NASA-CASE-LEW-11179-1] c27 N76-16229
Automatic thermal switch --- Space Shuttle equipment bay temperature control
[NASA-CASE-GSC-12415-1] c34 N80-18338
Adjustable high emittance gap filler --- reentry shielding for space shuttle vehicles
[NASA-CASE-ABC-11310-1] c27 N80-23454
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[NASA-CASE-GSC-12429-1] c37 N81-14320
System for sterilizing objects --- cleaning space vehicle systems
[NASA-CASE-KSC-11085-1] c54 N81-24724
Terminal guidance sensor system --- space shuttle coupling to orbiting satellites
[NASA-CASE-NPO-14521-1] c37 N81-27519
- SPACE SIMULATORS**
Space simulator with uniform test region radiation distribution, adapted to simulate Venus solar radiations
[NASA-CASE-XNP-00459] c11 N70-38675
Variable geometry manned orbital vehicle having high aerodynamic efficiency over wide speed range and incorporating auxiliary pivotal wings
[NASA-CASE-XLA-03691] c31 N71-15674
Development of method and equipment for testing heat radiative properties of material under controlled environmental conditions
[NASA-CASE-MFS-20096] c14 N71-30C26
Biocentrifuge system capable of exchanging specimen cages while in operational mode
[NASA-CASE-MFS-23825-1] c51 N81-32829
- SPACE STATIONS**
Manned space station launched in packaged condition and self erecting in orbit
[NASA-CASE-XLA-00258] c31 N70-38676
Meteoroid impact position locator aid for manned space station
[NASA-CASE-LAR-10629-1] c35 N75-33367
- Multiple in-line docking capability for rotating space stations
[NASA-CASE-MFS-20855-1] c15 N77-10112
- SPACE SUITS**
Astronaut restraint suit for high acceleration protection
[NASA-CASE-XAC-00405] c05 N70-41819
Space suit with pressure-volume compensator system
[NASA-CASE-XLA-05332] c05 N71-11194
Equipotential space suits utilizing mechanical aids to minimize astronaut energy at bending joints
[NASA-CASE-LAR-10007-1] c05 N71-11195
One piece human garment for use as contamination proof garment
[NASA-CASE-MSC-12206-1] c05 N71-17599
Space environmental work simulator with portions of space suit mounted to vacuum chamber wall
[NASA-CASE-XMF-07488] c11 N71-18773
Space suit body heat exchanger design composed of thermal conductance yarn and liquid coolant loops
[NASA-CASE-XMS-09571] c05 N71-19439
Conditioning suit for normal function of astronaut cardiovascular system in gravity environment
[NASA-CASE-XLA-02898] c05 N71-20268
Space suit using nonflexible material with low leakage and providing protection against thermal extremes, physical punctures, and radiation with high mobility articulation
[NASA-CASE-XAC-07043] c05 N71-23161
Sealing evacuation port and evacuating vacuum container such as space jackets
[NASA-CASE-XMF-03290] c15 N71-23256
Structure of fabric layers for micrometeoroid protection garment with capability for eliminating heat shorts for use in manufacturing space suits
[NASA-CASE-MSC-12109] c18 N71-26285
Venting device for pressurized space suit helmet to eliminate vomit expelled by crewmen
[NASA-CASE-XMS-09652-1] c05 N71-26333
Automatic control device for regulating inlet water temperature of liquid cooled spacesuit
[NASA-CASE-MSC-13917-1] c05 N72-15098
Pressure regulator for space suit worn underwater to simulate space environment for testing and experimentation
[NASA-CASE-MFS-20332] c05 N72-20097
Space suit with improved waist and torso movement
[NASA-CASE-ARC-10275-1] c05 N72-22092
Underwater space suit pressure control regulator
[NASA-CASE-MFS-20332-2] c05 N73-25125
Automatic temperature control for liquid cooled space suit
[NASA-CASE-ARC-10599-1] c05 N73-26071
Intra- and extravehicular life support space suite for Apollo astronauts
[NASA-CASE-MSC-12609-1] c05 N73-32012
Non-flammable elastomeric fiber from a fluorinated elastomer and containing an halogenated flame retardant
[NASA-CASE-MSC-14331-1] c27 N76-24405
Protective garment ventilation system
[NASA-CASE-XMS-04928] c54 N78-17679
Emergency space-suit helmet
[NASA-CASE-MSC-10954-1] c54 N78-18761
Spacesuit mobility joints
[NASA-CASE-ARC-11058-1] c54 N78-31735
Spacesuit torso closure
[NASA-CASE-ARC-11100-1] c54 N78-31736
Cooling system for removing metabolic heat from an hermetically sealed spacesuit
[NASA-CASE-ARC-11059-1] c54 N78-32721
Spacesuit mobility knee joints
[NASA-CASE-ARC-11058-2] c54 N79-24651
Pressure suit joint analyzer
[NASA-CASE-ARC-11314-1] c54 N80-30043
Absorbent product and articles made therefrom --- for collection of human wastes
[NASA-CASE-MSC-18223-1] c24 N81-16127
- SPACE TOOLS**
Pneumatic inflatable end effector
[NASA-CASE-MFS-23696-1] c54 N81-26718
- SPACE TRANSPORTATION SYSTEM**
Coupling device for moving vehicles
[NASA-CASE-GSC-12322-1] c37 N80-14398

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SPACE VEHICLE CHECKOUT PROGRAM

Hydraulic support apparatus for dynamic testing of space vehicles under near-free flight conditions
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[NASA-CASE-XKS-08012-2] c31 N71-15566

Developing high pressure gas purification and filtration system for use in test operations of space vehicles
[NASA-CASE-MFS-12806] c14 N71-17588

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[NASA-CASE-GSC-12032-2] c35 N76-19408

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Metal strip mounting arrangement for solar cell arrays on spacecraft
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Attitude sensor with scanning mirrors for detecting orientation of space vehicle with respect to planet
[NASA-CASE-XLA-00793] c21 N71-22680

Neutralization of magnetic fields produced by thin waferlike circuit elements in space vehicles
[NASA-CASE-XGS-03390] c03 N71-23187

Low mass ionizing device for use in electric thrust spacecraft engines
[NASA-CASE-XNP-01954] c28 N71-28850

Vacuum chamber with scale model of rocket engine base area of space vehicle
[NASA-CASE-MFS-20620] c11 N72-27262

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[NASA-CASE-XKS-09348] c09 N71-13521

Millimeter wave antenna system for spacecraft use
[NASA-CASE-GSC-10949-1] c07 N71-28565

Low weight, integrated thermoelectric generator/antenna combination for spacecraft
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Omnidirectional antenna array with circumferential slots for mounting on cylindrical space vehicle
[NASA-CASE-LAR-10163-1] c09 N72-25247

Portable antenna for spacecraft
[NASA-CASE-NFO-11361] c07 N72-32169

Collapsible support for antenna reflector applied to installation of spacecraft antennas
[NASA-CASE-NFO-11751] c07 N73-24176

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[NASA-CASE-GSC-12331-1] c18 N80-14183

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[NASA-CASE-MFS-20486-2] c27 N74-17283

Regenerable device for scrubbing breathable air of CO₂ and moisture without special heat exchanger equipment
[NASA-CASE-MSC-14771-1] c54 N77-32722

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Synchronizing apparatus for multi-access satellite time division multiplex system
[NASA-CASE-XGS-05918] c07 N69-39974

Phase shift data transmission system with pseudo-noise synchronization code modulated with digital data into single channel for spacecraft communication
[NASA-CASE-XNP-00911] c08 N70-41561

Design and development of tracking receiver for tracking satellites and receiving radio signal transmissions under adverse noise conditions

[NASA-CASE-XGS-08679] c10 N71-21473

Microwave omnidirectional antenna for use on spacecraft
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VHF/UHF parasitic probe antenna for spacecraft communication
[NASA-CASE-XKS-09340] c07 N71-24614

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[NASA-CASE-GSC-11428-1] c32 N74-20864

Switchable beamwidth monopulse method and system
[NASA-CASE-GSC-11924-1] c33 N76-27472

Antenna feed system for receiving circular polarization and transmitting linear polarization
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Common data buffer system --- communication with computational equipment utilized in spacecraft operations
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Apparatus and method for determining the position of a radiant energy source
[NASA-CASE-GSC-12147-1] c32 N81-27341

SPACECRAFT COMPONENTS
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[NASA-CASE-MFS-14741] c09 N70-20737

Vibration damping system operating in low vacuum environment for spacecraft mechanisms
[NASA-CASE-XMS-01620] c23 N71-15673

Intermittent type silica gel adsorption refrigerator for providing temperature control for spacecraft components
[NASA-CASE-XNP-00920] c15 N71-15906

Omnidirectional anisotropic molecular trap, used with vacuum pump to simulate space environments for testing spacecraft components
[NASA-CASE-XGS-00783] c30 N71-17788

Spacecraft air lock system to provide ingress and egress of astronaut without subjecting vehicular environment to vacuum of space
[NASA-CASE-XLA-02050] c31 N71-22968

Development and characteristics of docking structure and apparatus for spacecraft docking
[NASA-CASE-XMF-05941] c31 N71-23912

Design and development of release mechanism for spacecraft components, releasable despinn weights, and extensible gravity booms
[NASA-CASE-XGS-08718] c15 N71-24600

Space environment simulator for testing spacecraft components under aerospace conditions
[NASA-CASE-NFO-10141] c11 N71-24964

Design and development of spacecraft with outer shell structure heat shielding and built-in, removable excursion module
[NASA-CASE-MSC-13047-1] c31 N71-25434

Electronic detection system for peak acceleration limits in vibrational testing of spacecraft components
[NASA-CASE-NFO-10556] c14 N71-27185

Development of solid state polymer coating for obtaining thermal balance in spacecraft components
[NASA-CASE-XLA-01745] c33 N71-28903

Development of apparatus for mounting scientific experiments in spacecraft to permit utilization without maneuvering spacecraft
[NASA-CASE-MSC-12372-1] c31 N72-25842

Airlock
[NASA-CASE-MFS-20922-1] c18 N74-22136

Thrust-isolating mounting --- characteristics of support for loads mounted in spacecraft
[NASA-CASE-MFS-21680-1] c18 N74-27397

Variable ratio mixed-mode bilateral master-slave control system for shuttle remote manipulator system
[NASA-CASE-MSC-14245-1] c18 N75-27041

Surface conforming thermal/pressure seal --- for control devices in space vehicles
[NASA-CASE-MSC-18422-1] c37 N80-14400

High temperature penetrator assembly with bayonet plug and ramp-activated lock
[NASA-CASE-MSC-18526-1] c35 N80-19468

SPACECRAFT CONFIGURATIONS

Inflatable honeycomb panel element for lightweight structures usable in space stations and other construction
[NASA-CASE-XLA-00204] c32 N70-36536

Lenticular vehicle with foldable aerodynamic control flaps and reaction jets for operation above and within earth's atmosphere
[NASA-CASE-XGS-00260] c31 N70-37924

Stage separation system for spinning vehicles and payloads
[NASA-CASE-XLA-02132] c31 N71-10582

Spacecraft configurations and aerodynamic characteristics of space shuttle systems with two reusable stages
[NASA-CASE-MSC-12433] c31 N73-14854

Space vehicle
[NASA-CASE-MFS-22734-1] c18 N75-19329

SPACECRAFT CONSTRUCTION MATERIALS

Pressurized cell micrometeoroid detector
[NASA-CASE-XLA-00936] c14 N71-14996

Flexible barrier membrane comprising porous substrate and incorporating liquid gallium or indium metal used as sealant barriers for spacecraft walls and pumping liquid propellants
[NASA-CASE-XNP-08881] c17 N71-28747

Method of making a composite sandwich lattice structure
[NASA-CASE-LAR-11898-2] c24 N78-17149

SPACECRAFT CONTROL

Light sensitive digital aspect sensor for attitude control of earth satellites or space probes
[NASA-CASE-XGS-00359] c14 N70-34158

Spacecraft attitude control system using solar and earth sensors, gyroscopes, and jet actuators
[NASA-CASE-XNP-00465] c21 N70-35395

Multiple parachute system for landing control of Apollo type spacecraft
[NASA-CASE-XLA-00898] c02 N70-36804

Attitude control device for space vehicles
[NASA-CASE-XNP-00294] c21 N70-36938

Attitude orientation control of spin stabilized final stage space vehicles, using horizon scanners
[NASA-CASE-XLA-00281] c21 N70-36943

Aerodynamic configuration of reentry vehicle heat shield to provide longitudinal and directional stability at hypersonic velocities
[NASA-CASE-XMS-04142] c31 N70-41631

Star sensor system for roll attitude control of spacecraft
[NASA-CASE-XNP-01307] c21 N70-41856

Photomultiplier detector of Canopus for spacecraft attitude control
[NASA-CASE-XNP-03914] c21 N71-10771

Development of spacecraft experiment pointing and attitude control system
[NASA-CASE-XLA-05464] c21 N71-14132

Development of attitude control system for spacecraft orientation
[NASA-CASE-XGS-04393] c21 N71-14159

Drive mechanism for operating reactance attitude control system for aerospace bodies
[NASA-CASE-XNP-01598] c21 N71-15583

Attitude detection system using stellar references for three-axis control and spin stabilized spacecraft
[NASA-CASE-XGS-03431] c21 N71-15642

Large amplitude, linear inertial reference system of vibrating string type for spacecraft reference plane
[NASA-CASE-XAC-03107] c23 N71-16098

Construction and method of arranging plurality of ion engines to form cluster thereby increasing efficiency and control by decreasing heat radiated to space
[NASA-CASE-XNP-02923] c28 N71-23081

Ion beam deflector system for electronic thrust vector control for ion propulsion yaw, pitch, and roll forces
[NASA-CASE-LBW-10689-1] c28 N71-26173

Heated porous plug microthruster for spacecraft reaction jet controlled systems such as fuel flow regulation, propellant disassociation, and heat transfer augmentation
[NASA-CASE-GSC-10640-1] c28 N72-18766

Development of thrust control system for application to control of aircraft and

spacecraft

[NASA-CASE-MSC-13397-1] c21 N72-25595

All sky pointing attitude control system
[NASA-CASE-ABC-10716-1] c35 N77-20399

SPACECRAFT DESIGN

Lunar landing flight research vehicle
[NASA-CASE-XPR-00929] c31 N70-34966

Design and configuration of manned space capsule
[NASA-CASE-XLA-01332] c31 N71-15664

Development of spacecraft radiator cover
[NASA-CASE-MSC-12049] c31 N71-16080

Method and apparatus for connecting two spacecraft with probe of one inserted in rocket engine nozzle of other spacecraft
[NASA-CASE-MFS-11133] c31 N71-16222

Development and characteristics of protective coatings for spacecraft
[NASA-CASE-XNP-02507] c31 N71-17679

Development and characteristics of self supporting space vehicle
[NASA-CASE-XLA-00117] c31 N71-17680

Multi-mission space vehicle module stage design
[NASA-CASE-XNP-01543] c31 N71-17730

Development and characteristics of docking structure and apparatus for spacecraft docking
[NASA-CASE-XNP-05941] c31 N71-23912

Design and development of spacecraft with outer shell structure heat shielding and built-in, removable excursion module
[NASA-CASE-MSC-13047-1] c31 N71-25434

Spacecraft design with single point aerodynamic and hydrodynamic stability for emergency transport of men from space station to splashdown
[NASA-CASE-MSC-13281] c31 N72-18859

Space vehicle
[NASA-CASE-MFS-22734-1] c18 N75-19329

Space vehicle system
[NASA-CASE-MSC-12561-1] c18 N76-17185

Method and apparatus for neutralizing potentials induced on spacecraft surfaces
[NASA-CASE-GSC-11963-1] c33 N77-10429

SPACECRAFT DOCKING

Probe and drogue assembly for mechanical linking of two space vehicles
[NASA-CASE-XMS-03613] c31 N71-16346

Development and characteristics of docking structure and apparatus for spacecraft docking
[NASA-CASE-XNP-05941] c31 N71-23912

Latch for fastening spacecraft docking rings
[NASA-CASE-MSC-15474-1] c15 N71-26162

High energy absorption docking system design for docking large spacecraft
[NASA-CASE-MFS-20863] c31 N73-26876

Latch mechanism
[NASA-CASE-MSC-12549-1] c37 N74-27903

Spacecraft docking and alignment system --- using television camera system
[NASA-CASE-MSC-12559-1] c18 N76-14186

Multiple in-line docking capability for rotating space stations
[NASA-CASE-MFS-20855-1] c15 N77-10112

Combined docking and grasping device
[NASA-CASE-MFS-23088-1] c37 N77-23483

Satellite retrieval system
[NASA-CASE-MFS-25403-1] c18 N81-24164

Terminal guidance sensor system --- space shuttle coupling to orbiting satellites
[NASA-CASE-NPO-14521-1] c37 N81-27519

SPACECRAFT ELECTRONIC EQUIPMENT

Equipment for testing of ground station ranging equipment and spacecraft transponders
[NASA-CASE-XMS-05454-1] c07 N71-12391

Describing apparatus used in vacuum deposition of thin film inductive windings for spacecraft microcircuitry
[NASA-CASE-XNP-01667] c15 N71-17647

Nose cone mounted heat resistant antenna comprising plurality of adjacent layers of silica not introducing paths of high thermal conductivity through ablative shield
[NASA-CASE-XMS-04312] c07 N71-22984

SPACECRAFT ENVIRONMENTS

Portable environmental control and life support system for astronaut in and out of spacecraft
[NASA-CASE-XMS-09632-1] c05 N71-11203

Quick disconnect latch and handle combination for mounting articles on walls or supporting bases in spacecraft under zero gravity.

- conditions
[NASA-CASE-MFS-11132] c15 N71-17649
- Dual solid cryogens for spacecraft refrigeration
insuring low temperature cooling for extended periods
[NASA-CASE-GSC-10188-1] c23 N71-24725
- Dual stage check valve for cryogenic supply systems used in space flight environmental control system
[NASA-CASE-MSC-13587-1] c15 N73-30459
- Metering gun for dispensing precisely measured charges of fluid
[NASA-CASE-MSC-21163-1] c54 N74-17853
- SPACECRAFT GUIDANCE**
- Automatic ejection valve for attitude control and midcourse guidance of space vehicles
[NASA-CASE-XNP-00676] c15 N70-38596
- Electrical and electromechanical trigonometric computation assembly and space vehicle guidance system for aligning perpendicular axes of two sets of three-axes coordinate references
[NASA-CASE-XMP-00684] c21 N71-21688
- Design and characteristics of device for sensing solar radiation and providing spacecraft attitude control to maintain direction with respect to incident radiation
[NASA-CASE-XNP-05535] c14 N71-23040
- Inertial gimbal alignment system for spacecraft guidance
[NASA-CASE-XMP-01669] c21 N71-23289
- Hermetically sealed vibration damper design for use in gimbal assembly of spacecraft inertial guidance system
[NASA-CASE-MSC-10959] c15 N71-26243
- SPACECRAFT INSTRUMENTS**
- Mechanical coordinate converter for use with spacecraft tracking antennas
[NASA-CASE-XNP-00614] c14 N70-36907
- Air bearings for spacecraft gyros
[NASA-CASE-XMP-00339] c15 N70-39896
- Unfolding boom assembly with knuckle joints for positioning equipment for spacecraft
[NASA-CASE-XGS-00938] c32 N70-41367
- Pressurized cell micrometeoroid detector
[NASA-CASE-XLA-00936] c14 N71-14596
- Guidance analyzer having suspended spacecraft simulating sphere for astronavigation
[NASA-CASE-XNP-09572] c14 N71-15621
- Inertial component clamping assembly design for spacecraft guidance and control system mounting
[NASA-CASE-XMS-02184] c15 N71-20813
- Optical projector system for establishing optimum arrangement of instrument displays in aircraft, spacecraft, other vehicles, and industrial instrument consoles
[NASA-CASE-XNP-03853] c23 N71-21882
- Combined optical attitude and altitude indicating instrument for use in aircraft or spacecraft
[NASA-CASE-XLA-01907] c14 N71-23268
- Spacecraft transponder and ground station radar system for mapping planetary surfaces
[NASA-CASE-NPO-11001] c07 N72-21118
- Method and apparatus for providing active attitude control for spacecraft by converting any attitude motion of vehicle into simple rotational motion
[NASA-CASE-HQN-10439] c21 N72-21624
- Design and development of thermomechanical pump for transmitting warming fluid through fluid circuit to control temperature of spacecraft instrumentation
[NASA-CASE-NFO-11417] c15 N73-24513
- Deployable pressurized cell structure for a micrometeoroid detector
[NASA-CASE-LAR-10295-1] c35 N74-21062
- Distributed-switch Dicke radiometers
[NASA-CASE-GSC-12219-1] c35 N80-18359
- SPACECRAFT LANDING**
- Non-reusable kinetic energy absorber for application in soft landing of space vehicles
[NASA-CASE-XLE-00810] c15 N70-34661
- Plastic foam generator for space vehicle instrument payload package flotation in water landing
[NASA-CASE-XLA-00838] c03 N70-36778
- Device for use in descending spacecraft as altitude sensor for actuating deceleration retrorockets
[NASA-CASE-XMS-03792] c14 N70-41812
- SPACECRAFT LAUNCHING**
- Three stage motion restraining mechanism for restraining and damping three dimensional vibrational movement of gimballed package during launch of spacecraft
[NASA-CASE-GSC-10306-1] c15 N71-24694
- Development and characteristics of squib actuated explosive disconnect for spacecraft release from launch vehicle
[NASA-CASE-NFO-11330] c33 N73-26958
- SPACECRAFT MODELS**
- Space environment simulation system for measuring spacecraft electric field strength in plasma sheath
[NASA-CASE-XLE-02038] c09 N71-16086
- SPACECRAFT MODULES**
- Radial module manned space station with artificial gravity environment
[NASA-CASE-XMS-01906] c31 N70-41373
- Multi-mission space vehicle module stage design
[NASA-CASE-XMP-01543] c31 N71-17730
- Design and development of spacecraft with outer shell structure heat shielding and built-in, removable excursion module
[NASA-CASE-MSC-13047-1] c31 N71-25434
- Development and characteristics of thermal control system for maintaining constant temperature within spacecraft module with wide variations of component heat transfer
[NASA-CASE-GSC-11018-1] c31 N73-30829
- SPACECRAFT MOTION**
- Magnetic suspension and pointing system --- on a carrier vehicle
[NASA-CASE-LAR-11889-1] c35 N79-26372
- SPACECRAFT POSITION INDICATORS**
- Device for determining relative angular position of spacecraft and radiating celestial body
[NASA-CASE-GSC-11444-1] c14 N73-28490
- Spacecraft attitude sensing system design with narrow field of view sensor rotating about spacecraft x-y axis
[NASA-CASE-GSC-10890-1] c21 N73-30640
- SPACECRAFT POWER SUPPLIES**
- Spacecraft battery seals
[NASA-CASE-IGS-03864] c15 N69-24320
- Electrical power system for space flight vehicles operating over extended periods
[NASA-CASE-XMP-00517] c03 N70-34157
- Lightweight, rugged, inexpensive satellite battery for producing electrical power from ionosphere using electrodes with different contact potentials
[NASA-CASE-XGS-01593] c03 N70-35408
- Design and development of electric generator for space power system
[NASA-CASE-XLE-04250] c09 N71-20446
- Monostable multivibrator for conserving power in spacecraft systems
[NASA-CASE-GSC-10082-1] c10 N72-20221
- Rectangular solar cell stacked panels to generate electrical power aboard spacecraft
[NASA-CASE-NFO-11771] c03 N73-20040
- Thermoelectric power system --- for spacecraft
[NASA-CASE-MFS-22002-1] c44 N76-16612
- Solar energy power system
[NASA-CASE-MFS-21628-2] c44 N76-23675
- Module failure isolation circuit for paralleled inverters --- preventing system failure during power conditioning for spacecraft applications
[NASA-CASE-NPO-14000-1] c33 N79-24254
- A linear magnetic motor/generator --- to generate electric energy using magnetic flux for spacecraft's power supply
[NASA-CASE-GSC-12518-1] c33 N80-19424
- Solar driven liquid metal MHD power generator
[NASA-CASE-LAR-12495-1] c44 N81-32609
- SPACECRAFT PROPULSION**
- Colloidal particle generator for electrostatic engine for propelling space vehicles
[NASA-CASE-XLE-00817] c28 N70-33265
- Spacecraft trajectory correction propulsion system
[NASA-CASE-XNP-01104] c28 N70-39931
- Permanently magnetized ion engine casing construction for use in spacecraft propulsion systems
[NASA-CASE-XNP-06942] c28 N71-23293

- Development of voice operated controller for controlling reaction jets of spacecraft
[NASA-CASE-XLA-04063] c31 N71-32160
- Solid propellant motor
[NASA-CASE-NPO-11458A] c20 N78-32179
- General purpose rocket furnace
[NASA-CASE-MFS-23460-1] c12 N79-26075
- Speed control device for a heavy duty shaft --- solar sails for spacecraft propulsion
[NASA-CASE-NPO-14170-1] c37 N81-15364
- SPACECRAFT RADIATORS**
- Thermal control canister
[NASA-CASE-GSC-12253-1] c34 N79-31523
- SPACECRAFT RECOVERY**
- Assembly for opening flight capsule stabilizing and decelerating flaps with reference to capsule recovery
[NASA-CASE-XMF-00641] c31 N70-36410
- Method for deployment of flexible wing glider from space vehicle with minimum impact and loading
[NASA-CASE-XMS-00907] c02 N70-41630
- Satellite retrieval system
[NASA-CASE-MFS-25403-1] c18 N81-24164
- SPACECRAFT REENTRY**
- Manned space capsule configuration for orbital flight and atmospheric reentry
[NASA-CASE-XLA-00149] c31 N70-37538
- Event recorder with constant speed motor which rotates recording disk
[NASA-CASE-XLA-01832] c14 N71-21006
- SPACECRAFT SHIELDING**
- Development and characteristics of protective coatings for spacecraft
[NASA-CASE-XMP-02507] c31 N71-17679
- Double-wall isothermal cylinder containing heat transfer fluid thermal reservoir as spacecraft insulation cover
[NASA-CASE-MFS-20355] c33 N71-25353
- Binder stabilized zinc oxide pigmented coating for spacecraft thermal control
[NASA-CASE-XMF-07770-2] c18 N71-26772
- Electrically conductive thermal control coatings
[NASA-CASE-GSC-12207-1] c24 N79-14156
- Thermal insulation protection means
[NASA-CASE-MSC-12737-1] c24 N79-25142
- Thermal barrier pressure seal --- shielding junctions between spacecraft control surfaces and structures
[NASA-CASE-MSC-18134-1] c37 N81-15363
- A method and technique for installing light-weight fragile, high-temperature fiber insulation --- spacecraft heat sealing
[NASA-CASE-MSC-16934-2] c37 N81-16468
- SPACECRAFT STABILITY**
- Satellite stabilization reaction wheel scanner
[NASA-CASE-XGS-02629] c14 N71-21082
- Attitude sensor
[NASA-CASE-LAR-10586-1] c19 N74-15089
- Angular momentum control device used for stabilization of space vehicles and the like
[NASA-CASE-LAR-11051-1] c15 N76-14158
- Tetherline system for orbiting satellites
[NASA-CASE-MFS-23564-1] c15 N78-25119
- Active nutation controller
[NASA-CASE-GSC-12273-1] c35 N80-21719
- Method of and apparatus for damping nutation motion with minimum spin axis attitude disturbance
[NASA-CASE-GSC-12551-1] c18 N81-12156
- SPACECRAFT STRUCTURES**
- Collapsible, space erectable loop antenna system for space vehicle
[NASA-CASE-XMP-00437] c07 N70-40202
- Electro-optical system for maintaining two-axis alignment during milling operations on large tank-sections
[NASA-CASE-XMP-00908] c14 N70-40238
- Development of spacecraft radiator cover
[NASA-CASE-MSC-12049] c31 N71-16080
- Design and construction of satellite appendage tie-down cord
[NASA-CASE-XGS-02554] c31 N71-21064
- Development and characteristics of thermal sensitive panel for controlling ratio of solar absorptivity to surface emissivity for space vehicle temperature control
[NASA-CASE-XLA-07728] c33 N71-22690
- Space expandable tether device for use as passageway between two docked spacecraft
[NASA-CASE-XMS-10993] c15 N71-28936
- Delayed simultaneous appendage release mechanism for use on spacecraft equipped with despin mechanisms and releasable components
[NASA-CASE-GSC-10814-1] c03 N73-20039
- Pressurized panel meteoroid detector
[NASA-CASE-XLA-08916-2] c14 N73-28487
- Structural heat pipe --- for spacecraft wall thermal insulation system
[NASA-CASE-GSC-11619-1] c34 N75-12222
- Auger attachment method for insulation --- of spacecraft
[NASA-CASE-MSC-12615-1] c37 N76-19437
- Particulate and solar radiation stable coating for spacecraft
[NASA-CASE-LAR-10805-2] c34 N77-18382
- Diced tile thermal protection for spacecraft
[NASA-CASE-MSC-16366-1] c24 N79-23142
- Pneumatic inflatable end effector
[NASA-CASE-MFS-23696-1] c54 N81-26718
- SPACECRAFT TELEVISION**
- Electrically operated rotary shutter for television camera aboard spacecraft
[NASA-CASE-XMP-00637] c14 N70-40273
- Conversion system for transforming slow scan rate of Apollo TV camera on moon to fast scan of commercial TV
[NASA-CASE-XMS-07168] c07 N71-11300
- Optical conversion method --- for spacecraft television
[NASA-CASE-MSC-12618-1] c74 N78-17865
- SPACECRAFT TRACKING**
- Spacecraft ranging system
[NASA-CASE-NFO-10066] c09 N71-18598
- Elimination of tracking occultation problems occurring during continuous monitoring of interplanetary missions by using Earth orbiting communications satellite
[NASA-CASE-XAC-06029-1] c31 N71-24813
- Tracking mount for laser telescope employed in tracking large rockets and space vehicles to give information regarding azimuth and elevation
[NASA-CASE-MFS-14017] c14 N71-26627
- Orbital and entry tracking accessory for globes --- to provide range requirements for reentry vehicles to any landing site
[NASA-CASE-LAR-10626-1] c19 N74-21015
- Conical scan tracking system employing a large antenna
[NASA-CASE-NPO-14009-1] c32 N79-13214
- SPACECREWS**
- Development and characteristics of inflatable structure to provide escape from orbit for spacecrews under emergency conditions
[NASA-CASE-XMS-06162] c31 N71-28851
- SPALLATION**
- Method of producing I-123 --- by bombardment of cesium causing spallation
[NASA-CASE-LEW-11390-2] c25 N76-27383
- SPARK CHAMBERS**
- Laser measuring system for incremental assemblies --- measuring wire-wrapped frame assemblies in spark chambers
[NASA-CASE-GSC-12321-1] c36 N80-18380
- Inorganic spark chamber frame and method of making the same
[NASA-CASE-GSC-12354-1] c35 N80-20565
- SPARK GAPS**
- Spark gap type protective circuit for fast sensing and removal of overvoltage conditions
[NASA-CASE-XAC-08981] c09 N69-39297
- Mechanism for measuring nanosecond time differences between luminous events using streak camera
[NASA-CASE-XLA-01987] c23 N71-23976
- SPARK IGNITION**
- High temperature spark plug for igniting liquid rocket propellants
[NASA-CASE-XLE-00660] c28 N70-39925
- Plasma igniter for internal combustion engine
[NASA-CASE-NPO-13828-1] c37 N79-11405
- SPARK PLUGS**
- High temperature spark plug for igniting liquid rocket propellants
[NASA-CASE-XLE-00660] c28 N70-39925
- SPATIAL DISTRIBUTION**
- Electronic recording system for spatial mass

- distribution of liquid rocket propellant droplets or vapors ejected from high velocity nozzles
[NASA-CASE-NPO-10185] c10 N71-26339
- SPATIAL FILTERING**
Spatial filter for Q-switched lasers
[NASA-CASE-LEW-12164-1] c36 N77-32478
- SPECIMENS**
Fixture for environmental exposure of structural materials under compression
[NASA-CASE-LAR-12602-1] c35 N81-19429
- SPECTRAL REFLECTANCE**
Single reflector interference spectrometer and drive system therefor
[NASA-CASE-NPO-11932-1] c35 N74-23040
- SPECTRAL SIGNATURES**
Multispectral imaging and analysis system --- using charge coupled devices and linear arrays
[NASA-CASE-NPO-13691-1] c43 N79-17288
- SPECTROMETERS**
Spectrometer using photoelectric effect to obtain spectral data
[NASA-CASE-XNP-04161] c14 N71-15599
Variable frequency nuclear magnetic resonance spectrometer providing drive signals over wide frequency range and minimizing noise effects
[NASA-CASE-XNP-09830] c14 N71-26266
Maksutov spectrograph for low light level research
[NASA-CASE-XLA-10402] c14 N71-29041
Dual purpose optical instrument capable of simultaneously acting as spectrometer and diffractometer
[NASA-CASE-XNP-05231] c14 N73-28491
Design of gamma ray spectrometer for measurement of intense radiation using Compton scattering effect
[NASA-CASE-MFS-21441-1] c14 N73-30392
Mossbauer spectrometer radiation detector
[NASA-CASE-LAR-11155-1] c35 N74-15091
Single reflector interference spectrometer and drive system therefor
[NASA-CASE-NPO-11932-1] c35 N74-23040
Spectrometer integrated with a facsimile camera
[NASA-CASE-LAR-11207-1] c35 N75-19613
Resonant waveguide stark cell --- using microwave spectrometers
[NASA-CASE-LAR-11352-1] c33 N75-26245
Ion and electron detector for use in an ICR spectrometer
[NASA-CASE-NPO-13479-1] c35 N77-10492
Frequency-scanning particle size spectrometer
[NASA-CASE-NPO-13606-2] c35 N80-18364
Velocity servo for continuous scan Fourier interference spectrometer
[NASA-CASE-NPO-14093-1] c35 N86-20563
Visible and infrared polarization ratio spectrophotometer
[NASA-CASE-LAR-12285-1] c35 N80-28687
- SPECTROPHOTOMETERS**
Spectrophotofluorometer with 3-dimensional display to identify fluorescence spectra of carcinogenic and noncarcinogenic hydrocarbons
[NASA-CASE-XGS-01231] c14 N70-41676
High resolution Fourier interferometer-spectrophotopolarimeter
[NASA-CASE-NPO-13604-1] c35 N76-31490
Differential optoacoustic absorption detector
[NASA-CASE-NPO-13759-1] c74 N78-17667
- SPECTRORADIOMETERS**
Development and characteristics of spectroradiometer with wedge filters to eliminate adverse effect of pinholes in filters
[NASA-CASE-HQN-10683] c14 N71-34389
- SPECTROSCOPIC ANALYSIS**
Cylindrical reflector for resolving wide angle light beam from telescope into narrow beam for spectroscopic analysis
[NASA-CASE-XGS-08269] c23 N71-26206
- SPECTRUM ANALYSIS**
Spectrometer using photoelectric effect to obtain spectral data
[NASA-CASE-XNP-04161] c14 N71-15599
Emission spectroscopy method for contamination monitoring of inert gas metal arc welding
[NASA-CASE-XMF-02039] c15 N71-15671
Method and apparatus for high resolution power spectrum analysis
[NASA-CASE-NPO-10748] c08 N72-20177
- Frequency tracked pulse technique for ultrasonic analysis
[NASA-CASE-LAR-12697-1] c32 N80-26571
Stark cell optoacoustic detection of constituent gases in sample
[NASA-CASE-NPO-14143-1] c25 N81-14015
- SPECULAR REFLECTION**
Real time reflectometer --- measurement of specular reflectance
[NASA-CASE-MFS-23118-1] c35 N77-31465
- SPEECH RECOGNITION**
Speech analyzer
[NASA-CASE-GSC-11898-1] c32 N77-30309
- SPEED CONTROL**
System for maintaining motor at predetermined speed using digital pulses
[NASA-CASE-XMF-06892] c09 N71-24805
Optimal control system for automatic speed regulation of electric driven motor vehicle
[NASA-CASE-NPO-11210] c11 N72-20244
Two speed drive system --- mechanical device for changing speed on rotating vehicle wheel
[NASA-CASE-MFS-20645-1] c37 N74-23070
Low speed phaselock speed control system --- for brushless dc motor
[NASA-CASE-GSC-11127-1] c09 N75-24758
Speed control device for a heavy duty shaft --- solar sails for spacecraft propulsion
[NASA-CASE-NFO-14170-1] c37 N81-15364
Variable speed drive
[NASA-CASE-GSC-12643-1] c37 N81-24447
- SPEED REGULATORS**
Feedback control for direct current motor to achieve constant speed under varying loads
[NASA-CASE-MFS-14610] c09 N71-28886
- SPHERES**
Guidance analyzer having suspended spacecraft simulating sphere for astronavigation
[NASA-CASE-XNP-09572] c14 N71-15621
Plastic sphere for radar tracking and calibration
[NASA-CASE-XLA-11154] c07 N72-21117
- SPHERICAL SHELLS**
Hollow spherical electrode for shielding dielectric junction between high voltage conductor and insulator
[NASA-CASE-XLE-03778] c09 N69-21542
Development of mechanical device for measuring distance of point within sphere from surface of sphere
[NASA-CASE-XLA-06683] c14 N72-28436
- SPHERICAL TANKS**
Gauge for measuring quantity of liquid in spherical tank in reduced gravity
[NASA-CASE-XHS-06236] c14 N71-21007
- SPHERICAL WAVES**
Electrical device for developing converging spherical shock waves
[NASA-CASE-MFS-20890] c14 N72-22439
- SPIKE NOZZLES**
Constructing fluid spike nozzle to eliminate heat transfer and high temperature problems inherent in physical spikes
[NASA-CASE-XGS-01143] c31 N71-15647
- SPIKE POTENTIALS**
Elimination of current spikes in buck power converters
[NASA-CASE-NPO-14505-1] c33 N81-19393
- SPIN DYNAMICS**
Nutation damper for use on spinning body
[NASA-CASE-GSC-11205-1] c15 N73-25513
Stabilization of He2(a 3 Sigma u+ molecules in liquid helium by optical pumping for vacuum UV laser 6
[NASA-CASE-NPO-13993-1] c72 N79-13826
- SPIN REDUCTION**
Optical scanner mounted on rotating support structure with method of compensating for image or satellite rotation
[NASA-CASE-XGS-02401] c14 N69-27485
Bolt-latch mechanism for releasing despin weights from space vehicle
[NASA-CASE-XLA-00679] c15 N70-38601
Stretch Yo-Yo mechanism for reducing initial spin rate of space vehicle
[NASA-CASE-XGS-00619] c30 N70-40016
Stage separation system for spinning vehicles and payloads
[NASA-CASE-XLA-02132] c31 N71-10582

- Flexible turnstile antenna system for reducing nutation in spin-oriented satellites
[NASA-CASE-XMF-00442] c31 N71-10747
- SPIN STABILIZATION**
Dynamic precession damping of spin-stabilized vehicles by using rate gyroscope and angular accelerometer
[NASA-CASE-XLA-01989] c21 N70-34295
Attitude orientation control of spin stabilized final stage space vehicles, using horizon scanners
[NASA-CASE-XLA-00281] c21 N70-36943
Attitude detection system using stellar references for three-axis control and spin stabilized spacecraft
[NASA-CASE-XGS-03431] c21 N71-15642
Spin phase synchronization of cartwheel satellite in polar orbit
[NASA-CASE-XGS-05579] c31 N71-15676
High velocity guidance and spin stabilization gyro controlled jet reaction system for launch vehicle payloads
[NASA-CASE-XLA-01339] c31 N71-15692
Passive dual spin misalignment compensators --- gyro stabilized device
[NASA-CASE-GSC-11479-1] c35 N74-28097
Deployable flexible ventral fins for use as an emergency spin recovery device in aircraft
[NASA-CASE-LAR-10753-1] c08 N74-30421
Active nutation controller
[NASA-CASE-GSC-12273-1] c35 N80-21719
Thrust augmented spin recovery device
[NASA-CASE-LAR-11970-2] c08 N81-19130
- SPINDLES**
Variable contour securing system
[NASA-CASE-MSC-16270-1] c37 N78-27423
- SPINE**
Spine immobilization apparatus
[NASA-CASE-ARC-11167-1] c52 N81-25662
- SPINNERS**
Head for high speed spinner having a vacuum chuck --- holding silicon dioxide chips for etching
[NASA-CASE-NFO-15227-1] c37 N81-33482
- SPIRAL ANTENNAS**
Complementary cross-slot phased array antenna
[NASA-CASE-MSC-18532-1] c32 N80-29543
- SPIRAL WRAPPING**
Adjustable spiral wire winding device
[NASA-CASE-XMS-02383] c15 N71-15918
Continuous self-locking spiral wound seal --- for maintaining pressure between chambers in cryogenic wind tunnels
[NASA-CASE-LAR-12315-1] c37 N80-16339
Modified spiral wound retaining ring
[NASA-CASE-LAR-12361-1] c37 N81-12422
- SPIRALS (CONCENTRATORS)**
Spiral groove seal --- for hydraulic rotating shaft
[NASA-CASE-LEW-10326-3] c37 N74-10474
- SPIROMETERS**
Compact bellows spirometer for high speed and high altitude space travel
[NASA-CASE-XAR-01547] c05 N69-21473
- SPLINES**
Non-floating universal joint
[NASA-CASE-MSC-19546-1] c37 N77-25536
- SPLINTS**
Stretcher with rigid head and neck support with capability of supporting immobilized person in vertical position for removal from vehicle hatch to exterior also useful as splint stretcher
[NASA-CASE-XMF-06589] c05 N71-23159
- SPOILERS**
A hydraulic actuator mechanism to control aircraft spoiler movements through dual input commands
[NASA-CASE-LAR-12412-1] c05 N80-11065
- SPORES**
Lyophilized spore dispenser
[NASA-CASE-LAR-10544-1] c37 N74-13178
- SPOT WELDS**
Controlled arc spot welding method
[NASA-CASE-XMF-00392] c15 N70-34614
Automatic closed circuit television arc guidance control for welding joints
[NASA-CASE-MFS-13046] c07 N71-19433
- SPRAY CHARACTERISTICS**
Controlled overspray spray nozzle
[NASA-CASE-MFS-25139-1] c34 N80-20528
- SPRAY NOZZLES**
Rocket injector head
[NASA-CASE-XMF-04592-1] c20 N79-21125
Controlled overspray spray nozzle
[NASA-CASE-MFS-25139-1] c34 N80-20528
Fire extinguishing apparatus having a slidable mass for a penetrator nozzle --- for penetrating aircraft and shuttle orbiter skin
[NASA-CASE-KSC-11064-1] c31 N81-14137
- SPRAYED COATINGS**
Plasma spraying gun for forming diffusion bonded metal or ceramic coatings on substrates
[NASA-CASE-XLB-01604-2] c15 N71-15610
Production and application of sprayable fiber reinforced ablation material
[NASA-CASE-XLA-04251] c18 N71-26100
Metal plating process employing spraying of metallic power/peening particle mixture
[NASA-CASE-GSC-11163-1] c15 N73-32360
Sprayable low density ablator and application process
[NASA-CASE-MFS-23506-1] c24 N78-24290
Spray coating apparatus having a rotatable workpiece holder
[NASA-CASE-ARC-11110-1] c37 N78-32434
Controlled overspray spray nozzle
[NASA-CASE-MFS-25139-1] c34 N80-20528
Thermal barrier coating system having improved adhesion
[NASA-CASE-LEW-13359-1] c27 N81-24265
- SPRAYERS**
External device for liquid spray cooling of gas turbine blades
[NASA-CASE-XLB-00037] c28 N70-33372
Adhesive spray process for attaching biomedical skin electrodes
[NASA-CASE-XFR-07658-1] c05 N71-26293
Apparatus for liquid spray cooling of turbine blades
[NASA-CASE-XLB-00027] c33 N71-29152
Closed loop spray cooling apparatus --- for particle accelerator targets
[NASA-CASE-LEW-11981-1] c31 N78-17237
Spray coating apparatus having a rotatable workpiece holder
[NASA-CASE-ARC-11110-1] c37 N78-32434
- SPRAYING**
Aircraft wheel spray drag alleviator for dual tandem landing gear
[NASA-CASE-XLA-01583] c02 N70-36825
Closed loop spray cooling apparatus
[NASA-CASE-LEW-11981-2] c34 N79-20336
- SPREADING**
Tool attachment for spreading or moving away loose elements from terminal posts during winding of filamentary elements
[NASA-CASE-XMF-02107] c15 N71-10809
- SPRINGS (ELASTIC)**
Belleville spring assembly with elastic guides having low hysteresis
[NASA-CASE-XMF-09452] c15 N69-27504
Multiple Belleville spring assembly with even load distribution
[NASA-CASE-XMF-00840] c15 N70-38225
Switching mechanism with energy stored in coil spring
[NASA-CASE-XGS-00473] c03 N70-38713
Load cell protection device using spring-loaded breakaway mechanism
[NASA-CASE-XMS-06782] c32 N71-15974
Vibration isolation system, using coaxial helical compression springs
[NASA-CASE-NFO-11012] c15 N72-11391
Spring operated accelerator and constant force spring mechanism therefor
[NASA-CASE-ARC-10898-1] c35 N77-18417
Natural turbulence electrical power generator --- using wave action or random motion
[NASA-CASE-LAR-11551-1] c44 N80-29834
Unidirectional flexural pivot
[NASA-CASE-GSC-12622-1] c37 N81-22359
- SPUTTERING**
Deposition method for epitaxial beta SiC films having high degree of crystallographic perfection
[NASA-CASE-EEC-10120] c26 N69-33482
Development of procedure for producing thin transparent films of zinc oxide on transparent

- refractory substrate
[NASA-CASE-FRC-10019] c15 N73-12487
- Technique and equipment for sputtering using
apertured electrode and pulsed substrate bias
[NASA-CASE-LEW-10920-1] c17 N73-24569
- Sputtering holes with ion beamlets
[NASA-CASE-LEW-11646-1] c20 N74-31269
- Multitarget sequential sputtering apparatus
[NASA-CASE-NPO-13345-1] c37 N75-19684
- Method of cold welding using ion beam technology
[NASA-CASE-LEW-12982-1] c37 N81-19455
- Ion sputter textured graphite --- applications
to electron tube devices
[NASA-CASE-LEW-12919-1] c24 N81-27198
- SQUARE WAVES**
High speed phase detector design indicating
phase relationship between two square wave
input signals
[NASA-CASE-XNP-01306-2] c09 N71-24596
- SQUARES (MATHEMATICS)**
Apparatus for computing square roots
[NASA-CASE-XGS-04768] c08 N71-19437
- SQUIBS**
Contamination free separation nut eliminating
combustion products from ambient surroundings
generated by squib firing
[NASA-CASE-XGS-01971] c15 N71-15922
- STABILITY AUGMENTATION**
Velocity vector control system augmented with
direct lift control
[NASA-CASE-LAR-12268-1] c08 N81-24106
- STABILITY TESTS**
Method and apparatus for checking the stability
of a setup for making reflection type holograms
[NASA-CASE-MFS-21455-1] c35 N74-15146
- STABILIZATION**
Electro-optical stabilization of calibrated
light source
[NASA-CASE-MSC-12293-1] c14 N72-27411
- System for controlling torque buildup in
suspension of gondola connected to balloon by
parachute shroud lines
[NASA-CASE-GSC-11077-1] c02 N73-13008
- Development of aerodynamic control system to
control flutter over large range of
oscillatory frequencies using stability
augmentation techniques
[NASA-CASE-LAR-10682-1] c02 N73-26004
- Radiation hardening of MOS devices by boron ---
for stabilizing gate threshold potential
[NASA-CASE-GSC-11425-2] c76 N75-25730
- Arc control in compact arc lamps
[NASA-CASE-NPO-10870-1] c33 N77-22386
- Self-stabilizing radial face seal
[NASA-CASE-LEW-12991-1] c37 N81-24442
- STABILIZED PLATFORMS**
Hydraulic drive mechanism for leveling isolation
platforms
[NASA-CASE-XMS-03252] c15 N71-10658
- Failure detection and control means for improved
drift performance of a gimbaled platform system
[NASA-CASE-MFS-23551-1] c04 N76-26175
- Rotary leveling base platform
[NASA-CASE-ARC-10981-1] c37 N78-27425
- STABILIZERS**
Design and development of satellite despin device
[NASA-CASE-XMP-08523] c31 N71-20396
- STABILIZERS (AGENTS)**
Solid propellant stabilizer containing
nitroguanidine
[NASA-CASE-NPO-12000] c27 N72-25699
- STABILIZERS (FLUID DYNAMICS)**
Assembly for opening flight capsule stabilizing
and decelerating flaps with reference to
capsule recovery
[NASA-CASE-XMP-00641] c31 N70-36410
- Mechanical stabilization system for VTOL aircraft
[NASA-CASE-XLA-06339] c02 N71-13422
- Attitude stabilizer for nonguided missile or
vehicle with respect to trajectory
[NASA-CASE-ARC-10134] c30 N72-17673
- Inflatable stabilizing system for use on life
raft to reduce rocking and preclude capsizing
[NASA-CASE-MSC-12393-1] c02 N73-26006
- Externally supported internally stabilized
flexible duct joint
[NASA-CASE-MFS-19194-1] c37 N76-14460
- STABLE OSCILLATIONS**
Automatic measuring and recording of gain and
zero drift characteristics of electronic
amplifier
[NASA-CASE-XMS-05562-1] c09 N69-39986
- STACKS**
Remote fire stack igniter --- with
solenoid-controlled valve
[NASA-CASE-MFS-21675-1] c25 N74-33378
- STAGE SEPARATION**
Stage separation using remote control release of
joint with explosive insert
[NASA-CASE-XLA-02854] c15 N69-27490
- Piezoelectric means for missile stage separation
indication and stage initiation
[NASA-CASE-XLA-00791] c03 N70-39930
- Space vehicle stage coupling and quick release
separation mechanism
[NASA-CASE-XLA-01441] c15 N70-41679
- Stage separation system for spinning vehicles
and payloads
[NASA-CASE-XLA-02132] c31 N71-10582
- Payload/spent rocket engine case separation system
[NASA-CASE-XLA-05369] c31 N71-15687
- Separation mechanism for use between stages of
multistage rocket vehicles
[NASA-CASE-XLA-00188] c15 N71-22874
- Development of remotely controlled shaped charge
for lateral displacement of rocket stages
after separation
[NASA-CASE-XLA-04804] c31 N71-23008
- Electrical circuit selection device for
simulating stage separation of flight vehicle
[NASA-CASE-XKS-04631] c10 N71-23663
- Frangible connecting link suitable for rocket
stage separation
[NASA-CASE-MSC-11849-1] c15 N72-22488
- STAGNATION PRESSURE**
Flow meter for measuring stagnation pressure in
boundary layer around high speed flight vehicle
[NASA-CASE-XFR-02007] c12 N71-24692
- Stagnation pressure probe --- for measuring
pressure of supersonic gas streams
[NASA-CASE-LAR-11139-1] c35 N74-32878
- STAGNATION TEMPERATURE**
Measuring conductive heat flow and thermal
conductivity of laminar gas stream in
cylindrical plug to simulate atmospheric reentry
[NASA-CASE-XLE-00266] c14 N70-34156
- STAINING**
Automated single-slide staining device
[NASA-CASE-LAR-11649-1] c51 N77-27677
- STAINLESS STEELS**
Joining aluminum to stainless steel by bonding
aluminum coatings onto titanium coated
stainless steel and brazing aluminum to
aluminum/titanium coated steel
[NASA-CASE-MFS-07369] c15 N71-20443
- Ultrasonic scanning system for in-place
inspection of brazed tube joints
[NASA-CASE-MFS-20767-1] c38 N74-15130
- Method of forming a vick for a heat pipe
[NASA-CASE-NPO-13391-1] c34 N76-27515
- Method of making reinforced composite structure
[NASA-CASE-LEW-12619-1] c24 N77-19171
- Stainless steel panel for selective absorption
of solar energy and the method of producing
said panel
[NASA-CASE-MFS-23518-2] c44 N77-31611
- Method of forming dynamic membrane on stainless
steel support
[NASA-CASE-MSC-18172-1] c26 N80-19237
- STAMPING**
Holding fixture for a hot stamping press
[NASA-CASE-GSC-12619-1] c37 N81-16470
- STANDARDS**
Microwave integrated circuit for Josephson
voltage standards
[NASA-CASE-MFS-23845-1] c33 N81-17348
- STANDING WAVES**
Method and apparatus for shaping and enhancing
acoustical levitation forces
[NASA-CASE-MFS-25050-1] c71 N81-15767
- STAR TRACKERS**
Star sensor system for roll attitude control of
spacecraft
[NASA-CASE-XNP-01307] c21 N70-41856
- Sun tracker with rotatable plane-parallel plate
and two photocells
[NASA-CASE-XGS-01159] c21 N71-10678

- Photomultiplier detector of Canopus for spacecraft attitude control
[NASA-CASE-XNP-03914] c21 N71-10771
- Attitude detection system using stellar references for three-axis control and spin stabilized spacecraft
[NASA-CASE-XGS-03431] c21 N71-15642
- Relay controlled voltage switching unit for scanning circuitry of star tracker
[NASA-CASE-NPO-11253] c09 N72-17157
- Method for producing reticles for use in outer space
[NASA-CASE-GSC-11188-2] c21 N73-19630
- Production method of star tracking reticles for transmitting in visible and near ultraviolet regions
[NASA-CASE-GSC-11188-1] c14 N73-32320
- Formation of star tracking reticles
[NASA-CASE-GSC-11188-3] c74 N74-20008
- Star scanner --- with a reticle with a pair of slits having differing separation
[NASA-CASE-GSC-11569-1] c89 N74-30886
- Programmable scan/read circuitry for charge coupled device imaging detectors --- for a startracker
[NASA-CASE-NPO-15345-1] c33 N81-27403
- STARK EFFECT**
Resonant waveguide stark cell --- using microwave spectrometers
[NASA-CASE-LAR-11352-1] c33 N75-26245
- Stark-effect modulation of CO2 laser with NH2D
[NASA-CASE-NPO-11945-1] c36 N76-18427
- Stark cell optoacoustic detection of constituent gases in sample
[NASA-CASE-NPO-14143-1] c25 N81-14C15
- Stark effect spectrophone for continuous absorption spectra monitoring --- a technique for gas analysis
[NASA-CASE-NPO-15102-1] c25 N81-25159
- STARTERS**
Starting circuit design for initiating and maintaining arcs in vapor lamps
[NASA-CASE-XNP-01058] c09 N71-12540
- Motor run-up system --- power lines
[NASA-CASE-NPO-13374-1] c33 N75-19524
- STARTING**
Portable device for use in starting air-start-units for aircraft and having cable lead testing capability
[NASA-CASE-FRC-10113-1] c33 N80-26599
- STATIC FRICTION**
Kinetic and static friction force measurement between magnetic tape and magnetic head surfaces
[NASA-CASE-XNP-08680] c14 N71-22995
- Static coefficient test method and apparatus
[NASA-CASE-GSC-11893-1] c35 N76-31489
- STATIC INVERTERS**
Describing static inverter with single or multiple phase output
[NASA-CASE-XNP-00663] c08 N71-18752
- Development and characteristics of oscillating static inverter
[NASA-CASE-XGS-05289] c09 N71-19470
- STATIC LOADS**
Measuring shear-creep compliance of solid and liquid materials used in spacecraft components
[NASA-CASE-XLE-01481] c14 N71-10781
- Apparatus for measuring load on cable under static or dynamic conditions comprising pulleys pivoting structure against restraint of tension strap
[NASA-CASE-XMS-04545] c15 N71-22878
- STATIC PRESSURE**
Pressure probe for sensing ambient static air pressures
[NASA-CASE-XLA-00481] c14 N70-36824
- Ambient atmospheric pressure sensing device for determining altitude of flight vehicles
[NASA-CASE-XLA-00128] c15 N70-37925
- Static pressure probe
[NASA-CASE-LAR-11552-1] c35 N76-14429
- Static pressure orifice system testing method and apparatus
[NASA-CASE-LAR-12269-1] c35 N80-18358
- STATIONKEEPING**
Method of stationkeeping for lenticular gravity gradient satellites
[NASA-CASE-XLA-03132] c31 N71-22569
- STATISTICAL CORRELATION**
Optical sensing of supersonic flows by correlating deflections in laser beams through flow
[NASA-CASE-MFS-20642] c14 N72-21407
- STATOR BLADES**
Stator rotor tools
[NASA-CASE-MSC-16000-1] c37 N78-24544
- STATORS**
Nickel base alloy --- for gas turbine engine stator vanes
[NASA-CASE-LEW-12270-1] c26 N77-32280
- Liquid metal slip ring
[NASA-CASE-LEW-12277-2] c33 N78-25323
- Natural turbulence electrical power generator --- using wave action or random motion
[NASA-CASE-LAR-11551-1] c44 N80-29834
- STEADY STATE**
Steady state thermal radiometers
[NASA-CASE-MFS-21108-1] c34 N74-27861
- STEAM TURBINES**
Vapor generating boiler system for turbine motor
[NASA-CASE-XLE-00785] c33 N71-16104
- STEELS**
Zinc dust formulation for abrasion resistant steel coatings
[NASA-CASE-GSC-10361-1] c18 N72-23581
- Moving body velocity arresting line --- elongating steel cable
[NASA-CASE-LAR-12372-1] c37 N80-18399
- STEERABLE ANTENNAS**
Apparatus for generating microwave signals at progressively related phase angles for driving antenna array
[NASA-CASE-BEC-10046] c10 N71-18722
- Satellite radio communication system with remote steerable antenna
[NASA-CASE-XNP-02389] c07 N71-28900
- Amplitude steered array
[NASA-CASE-GSC-11446-1] c33 N74-20860
- Phased array antenna control
[NASA-CASE-MSC-14939-1] c32 N79-11264
- STEERING**
Steerable solid propellant rocket motor adapted to effect payload orientation as multistage rocket stage or reduce velocity as retrorocket
[NASA-CASE-XNP-00234] c28 N70-38645
- STELLAR LUMINOSITY**
Development of star intensity measuring system which minimizes effects of outside interference
[NASA-CASE-XNP-06510] c14 N71-23797
- STELLAR SPECTRA**
Development of star intensity measuring system which minimizes effects of outside interference
[NASA-CASE-XNP-06510] c14 N71-23797
- STENCIL PROCESSES**
Method for making patterns for resin matrix composites
[NASA-CASE-ARC-11246-1] c24 N80-22410
- STEREOPHOTOGRAPHY**
Stereo photomicrography system with stereo microscope for viewing specimen at various magnifications
[NASA-CASE-LAR-10176-1] c14 N72-20380
- STEREOSCOPIC VISION**
Stereoscopic television system, including projecting pair of binocular images
[NASA-CASE-ARC-10160-1] c23 N72-27728
- STERILIZATION**
Using ethylene oxide in preparation of sterilized solid rocket propellants and encapsulating materials
[NASA-CASE-XNP-01749] c27 N70-41897
- Ethylene oxide sterilization and encapsulating process for sterile preservation of instruments and solid propellants
[NASA-CASE-XNP-09763] c14 N71-20461
- Environmentally controlled suit for working in sterile chamber
[NASA-CASE-LAR-10076-1] c05 N73-20137
- Protein sterilization of firefly luciferase without denaturation
[NASA-CASE-GSC-10225-1] c06 N73-27086
- Heat sterilizable patient ventilator
[NASA-CASE-NPO-13313-1] c54 N75-27761
- Portable heatable container
[NASA-CASE-NPO-14237-1] c44 N80-20808
- System for sterilizing objects --- cleaning space vehicle systems

[NASA-CASE-KSC-11085-1] c54 N81-24724

STERILIZATION EFFECTS
Reliability of electrical connectors after heat sterilization
[NASA-CASE-NPO-10694] c09 N72-20200

STIFFNESS
Modified face seal for positive film stiffness
[NASA-CASE-LEW-12989-1] c37 N80-12414

STIMULATED EMISSION
Repetitively pulsed wavelength selective carbon dioxide laser
[NASA-CASE-ERC-10178] c16 N71-24832

STIRLING CYCLE
Stirling cycle engine and refrigeration systems
[NASA-CASE-NPO-13613-1] c37 N76-29590
Power control for hot gas engines
[NASA-CASE-NPO-14220-1] c37 N81-14318
Phase-angle controller for Stirling engines
[NASA-CASE-NPO-14388-1] c37 N81-17432
Solar energy receiver for a Stirling engine
[NASA-CASE-NPO-14619-1] c44 N81-17518
Hot gas engine with dual crankshafts
[NASA-CASE-NPO-14221-1] c37 N81-25370

STIRRING
Design of mechanical device for stirring several test tubes simultaneously
[NASA-CASE-YAC-06956] c15 N71-21177

STORAGE
Design and development of fluid sample collector
[NASA-CASE-XMS-06767-1] c14 N71-20435
Sodium storage and injection system
[NASA-CASE-NPO-14384-1] c37 N80-10494

STORAGE BATTERIES
Leak resistant bonded elastomeric seal for secondary electrochemical cells
[NASA-CASE-XGS-02631] c03 N71-23006
Automatically charging battery of electric storage cells
[NASA-CASE-XNP-04758] c03 N71-24605
Elimination of two step voltage discharge property of silver zinc batteries by using divalent silver oxide capacity of cell to charge anodes to monovalent silver state
[NASA-CASE-XGS-01674] c03 N71-29129
Electric storage battery with high impact resistance
[NASA-CASE-NPO-11021] c03 N72-20032
Hydrogen-bromine secondary battery
[NASA-CASE-NPO-13237-1] c44 N76-18641
Rechargeable battery which combats shape change of the zinc anode
[NASA-CASE-HQN-10862-1] c44 N76-29699
Electrically rechargeable REDOX flow cell
[NASA-CASE-LEW-12220-1] c44 N77-14581
Formulated plastic separators for soluble electrode cells --- rubber-ion transport membranes
[NASA-CASE-LEW-12358-1] c44 N79-17313
Toroidal cell and battery --- storage battery for high amp-hour load applications
[NASA-CASE-LEW-12918-1] c44 N81-24521

STORAGE STABILITY
Storage stable, thermally activated foaming compositions for erecting and rigidizing mechanisms of thin sheet solar collectors
[NASA-CASE-LAR-10373-1] c18 N71-26155
Gas diffusion liquid storage bag and method of use for storing blood
[NASA-CASE-NPO-13930-1] c52 N79-14749

STORAGE TANKS
Expulsion bladder equipped storage tank structure
[NASA-CASE-XNP-00612] c11 N70-38182
Development of apparatus and method for testing leakage of large tanks
[NASA-CASE-XNP-02392] c32 N71-24285
Apparatus for aligning shadow shields and cryogenic storage tanks in outer space with the sun
[NASA-CASE-KSC-10622-1] c31 N72-21693
Cryogenic container compound suspension strap
[NASA-CASE-ABC-11157-1] c37 N80-18393

STRAIN GAGE ACCELEROMETERS
Accelerometer with FM output signals indicative of mechanical strain on it
[NASA-CASE-XLA-00492] c14 N70-34799
Strain gage accelerometer for angular acceleration measurement
[NASA-CASE-XMS-05936] c14 N70-41682

STRAIN GAGE BALANCES
Self-balancing strain gage transducer with bridge circuit
[NASA-CASE-MFS-12827] c14 N71-17656

STRAIN GAGES
Semiconductor p-n junction on needle apex to provide stress and strain sensor
[NASA-CASE-XLA-04980] c09 N69-27422
Apparatus for forming wire grids for electric strain gages
[NASA-CASE-XLE-00023] c15 N70-33330
Force measuring instrument for structural members, particularly fastening bolts or studs
[NASA-CASE-XNF-00456] c14 N70-34705
Strain gage for detecting and measuring mechanical strain in thermally strained specimens
[NASA-CASE-PRC-10053] c14 N70-35587
Difference indicating circuit used in conjunction with device measuring gravitational fields
[NASA-CASE-XNP-08274] c10 N71-13537
Water cooled gage for strain measurements in high temperature environments
[NASA-CASE-XNP-09205] c14 N71-17657
Development of apparatus for measuring successive increments of strain on elastomers
[NASA-CASE-XMF-04680] c15 N71-19489
Strain gage measurement of elongation due to thermally and mechanically induced stresses
[NASA-CASE-XGS-04478] c14 N71-24233
Method for temperature compensating semiconductor gages by exposure to high energy radiation
[NASA-CASE-XLA-04555-1] c14 N71-25892
Pulsed excitation voltage circuit for strain gage bridge transducers
[NASA-CASE-PRC-10036] c09 N72-22200
Method for making semiconductor p-n junction stress and strain sensor
[NASA-CASE-XLA-04980-2] c14 N72-28438
Device for monitoring a change in mass in varying gravimetric environments
[NASA-CASE-MFS-21556-1] c35 N74-26945
Strain gauge ambiguity sensor for segmented mirror active optical system
[NASA-CASE-MFS-20506-1] c35 N75-12273
Subminiature insertable force transducer --- including a strain gage to measure forces in muscles
[NASA-CASE-NPO-13423-1] c33 N75-31329
Self-supporting strain transducer
[NASA-CASE-LAR-11263-1] c35 N75-33369
Strain gage mounting assembly
[NASA-CASE-NPO-13170-1] c35 N76-14430
High temperature strain gage calibration fixture
[NASA-CASE-LAR-11500-1] c35 N76-24523
Miniature biaxial strain transducer
[NASA-CASE-LAR-11648-1] c35 N77-14407
CW ultrasonic bolt tensioning monitor
[NASA-CASE-LAR-12016-1] c39 N78-15512
Attaching of strain gages to substrates
[NASA-CASE-PRC-10093-1] c35 N80-20560
Pulsed phase locked loop strain monitor
[NASA-CASE-LAR-12772-1] c33 N81-15195
Photomechanical transducer
[NASA-CASE-NPO-14363-1] c39 N81-25400

STRAIN RATE
Process for analysis of strain field of structures subjected to large deformations involving low modulus substrate with thin coating
[NASA-CASE-LAR-10765-1] c32 N73-20740

STRAPDOWN INERTIAL GUIDANCE
All sky pointing attitude control system
[NASA-CASE-ABC-10716-1] c35 N77-20399

STRAPS
Meter for use in detecting tension in straps having predetermined elastic characteristics
[NASA-CASE-MFS-22189-1] c35 N75-19615
Cryogenic container compound suspension strap
[NASA-CASE-ABC-11157-1] c37 N80-18393

STRATIFICATION
A stable density-stratification solar pond
[NASA-CASE-NPO-15419-1] c44 N81-27599

STRATIGRAPHY
System for plotting subsoil structure and method therefor
[NASA-CASE-NPO-14191-1] c31 N80-32584

STREAMS

Apparatus for measuring a sorbate dispersed in a fluid stream
[NASA-CASE-ARC-10896-1] c35 N78-19465

STRESS ANALYSIS

Development of system for measuring damping characteristics of structure or system subjected to random forces or influences
[NASA-CASE-ARC-10154-1] c14 N72-22440

Process for analysis of strain field of structures subjected to large deformations involving low modulus substrate with thin coating
[NASA-CASE-LAR-10765-1] c32 N73-20740

High temperature strain gage calibration fixture
[NASA-CASE-LAR-11500-1] c35 N76-24523

STRESS CONCENTRATION

Self-supporting strain transducer
[NASA-CASE-LAR-11263-1] c35 N75-33369

STRESS CORROSION

Method to prevent stress corrosion cracking in titanium alloys
[NASA-CASE-NPO-10271] c17 N71-16393

Method and apparatus for inducing compressive stresses in pressure vessel to prevent stress corrosion
[NASA-CASE-XLA-07390] c15 N71-18616

STRESS MEASUREMENT

Semiconductor p-n junction on needle apex to provide stress and strain sensor
[NASA-CASE-XLA-04980] c09 N69-27422

Force measuring instrument for structural members, particularly fastening bolts or studs
[NASA-CASE-XMP-00456] c14 N70-34705

Self-balancing strain gage transducer with bridge circuit
[NASA-CASE-MFS-12827] c14 N71-17656

Servocontrol system for measuring local stresses at geometric discontinuity in stressed material
[NASA-CASE-XLA-08530] c32 N71-25360

Amplifying ribbon extensometer
[NASA-CASE-LAR-11825-1] c35 N77-22449

CW ultrasonic bolt tensioning monitor
[NASA-CASE-LAR-12016-1] c39 N78-15512

STRESS RELAXATION

Method for alleviating thermal stress damage in laminates --- metal matrix composites
[NASA-CASE-LEW-12493-1] c24 N81-17170

STRESS RELIEVING

Nut and bolt fastener permitting all-directional movement of skin sections with respect to supporting structure
[NASA-CASE-XLA-01807] c15 N71-10799

STRESSERS

Tape recorder designed for low power consumption and resistance to operational failure under high stress conditions
[NASA-CASE-IGS-08259] c14 N71-23698

Strain gage measurement of elongation due to thermally and mechanically induced stresses
[NASA-CASE-IGS-04478] c14 N71-24233

Strain arrestor plate for fused silica tile --- bonding of thermal insulation to metallic plates or structural parts
[NASA-CASE-MSC-14182-1] c27 N76-14264

Fixture for environmental exposure of structural materials under compression
[NASA-CASE-LAR-12602-1] c35 N81-19429

STRETCHERS

Development and characteristics of rescue litter with inflatable flotation device for water rescue application
[NASA-CASE-XMS-04170] c05 N71-22748

Stretcher with rigid head and neck support with capability of supporting immobilized person in vertical position for removal from vehicle hatch to exterior also useful as splint stretcher
[NASA-CASE-XMP-06589] c05 N71-23159

STRETCHING

Device for securing together structural members with axially stretched bolt and nut
[NASA-CASE-GSC-11149-1] c15 N73-30457

STRINGERS

Universal connectors for joining stringers
[NASA-CASE-LAR-12744-1] c37 N81-31551

STRINGS

Cord restraint system for pressure suit joints
[NASA-CASE-XMS-09635] c05 N71-24623

STRIP TRANSMISSION LINES

Microwave integrated circuit for Josephson voltage standards
[NASA-CASE-MFS-23845-1] c33 N81-17348

STRUCTURAL ANALYSIS

Window defect planar mapping technique
[NASA-CASE-MSC-19442-1] c74 N77-10899

STRUCTURAL DESIGN

Design of inflatable life raft for aircrafts and boats
[NASA-CASE-XMS-00863] c05 N70-34857

Structural design of high pressure regulator valve
[NASA-CASE-XNP-00710] c15 N71-10778

Graphic illustration of lifting body design
[NASA-CASE-FRC-10063] c01 N71-12217

Design of ring wing vehicle of high drag-to-weight ratio to withstand reentry stress into low density atmosphere
[NASA-CASE-XLA-04901] c31 N71-24315

Opto-mechanical subsystem with temperature compensation through isothermal design
[NASA-CASE-GSC-12059-1] c35 N77-27366

Lightweight reflector assembly
[NASA-CASE-NFO-13707-1] c74 N77-28933

Horizontally mounted solar collector
[NASA-CASE-MFS-23349-1] c44 N79-23481

STRUCTURAL ENGINEERING

Beam connector apparatus and assembly
[NASA-CASE-MFS-25134-1] c31 N81-12283

A rectangular rod-wall sound shield
[NASA-CASE-LAR-12883-1] c09 N81-29138

STRUCTURAL FAILURE

Method and apparatus for nondestructive testing of pressure vessels
[NASA-CASE-NFO-12142-1] c38 N76-28563

STRUCTURAL MEMBERS

Broadband chokes and absorbers to reduce spurious radiation patterns of antenna array caused by support structures
[NASA-CASE-XMS-05303] c07 N69-27462

Electro-optical/computer system for aligning large structural members and maintaining correct position
[NASA-CASE-XNP-02029] c14 N70-41955

Nut and bolt fastener permitting all-directional movement of skin sections with respect to supporting structure
[NASA-CASE-XLA-01807] c15 N71-10799

Universal joints for connecting two displaced shafts or members
[NASA-CASE-NPO-10646] c15 N71-28467

Device for securing together structural members with axially stretched bolt and nut
[NASA-CASE-GSC-11149-1] c15 N73-30457

Method of laminating structural members
[NASA-CASE-XLA-11028-1] c24 N74-27035

Folding structure fabricated of rigid panels
[NASA-CASE-XHQ-02146] c18 N75-27040

Strain arrestor plate for fused silica tile --- bonding of thermal insulation to metallic plates or structural parts
[NASA-CASE-MSC-14182-1] c27 N76-14264

Mechanical end joint system for structural column elements
[NASA-CASE-LAR-12482-1] c37 N80-22704

Universal connectors for joining stringers
[NASA-CASE-LAR-12744-1] c37 N81-31551

STRUCTURAL STABILITY

Latching device
[NASA-CASE-MFS-21606-1] c37 N75-19685

Flanged major modular assembly jig
[NASA-CASE-MSC-19372-1] c39 N76-31562

STRUCTURAL VIBRATION

Rectangular electric conductors for conductor cables to withstand spacecraft vibration and controlled atmosphere
[NASA-CASE-MFS-14741] c09 N70-20737

Determining sway of buildings by low frequency device using pendulum
[NASA-CASE-XMP-00479] c14 N70-34794

Transducer for measuring deflections from vibrating structures
[NASA-CASE-XLA-03135] c32 N71-16428

Active notch filter network with variable notch depth, width and frequency
[NASA-CASE-FRC-11055-1] c33 N80-29583

STRUCTURES

Deformation measuring apparatus with feedback control for arbitrarily shaped structures

- [NASA-CASE-LAR-10098] c32 N71-26681
- STRUTS**
- Low onset rate energy absorber in form of strut assembly for crew couch of Apollo command module
- [NASA-CASE-MSC-12279-1] c15 N70-35679
- Collapsible support for antenna reflector applied to installation of spacecraft antennas
- [NASA-CASE-NPO-11751] c07 N73-24176
- Locking redundant link
- [NASA-CASE-LAR-11900-1] c37 N79-14382
- Beam connector apparatus and assembly
- [NASA-CASE-MFS-25134-1] c31 N81-12283
- STUDS (STRUCTURAL MEMBERS)**
- Design of quick release locking pin for joining two or more load-carrying structural members
- [NASA-CASE-MFS-16495] c15 N72-11385
- Tool for mounting and removing studs with adhesive coated head portion
- [NASA-CASE-MFS-20299] c15 N72-11392
- Insert facing tool --- manually operated cutting tool for forming studs in honeycomb material
- [NASA-CASE-MFS-21485-1] c37 N74-25968
- STYRENES**
- Heat resistant polymers of oxidized styrylphosphine
- [NASA-CASE-MSC-14903-1] c27 N78-32256
- Compound oxidized styrylphosphine --- flame resistant vinyl polymers
- [NASA-CASE-MSC-14903-2] c27 N80-10358
- Heat resistant polymers of oxidized styrylphosphine
- [NASA-CASE-MSC-14903-3] c27 N80-24438
- Low temperature cross linking polyimides
- [NASA-CASE-LRW-12676-1] c27 N80-26447
- SUBLIMATION**
- Tubular sublimatory evaporator heat sink
- [NASA-CASE-ARC-10912-1] c34 N77-19353
- Polymeric compositions and their method of manufacture --- forming filled polymer systems using cryogenics
- [NASA-CASE-NPO-10424-1] c27 N81-24258
- SUBMARINES**
- Low density bismaleimide-carbon microballoon composites --- aircraft and submarine compartment safety
- [NASA-CASE-ARC-11040-2] c24 N78-27184
- SUBMERGING**
- Liquid-immersible electrostatic ultrasonic transducer
- [NASA-CASE-LAR-12465-1] c35 N80-18363
- Liquid immersion apparatus for minute articles
- [NASA-CASE-MFS-25363-1] c31 N80-32585
- SUBMILLIMETER WAVES**
- Ladder supported ring bar circuit
- [NASA-CASE-LRW-13570-1] c33 N81-24348
- SUBMINIATURIZATION**
- Micromicroampere current measuring circuit, with two subminiature thermionic diodes with filament cathodes
- [NASA-CASE-XNP-00384] c09 N71-13530
- SUBREFLECTORS**
- Dish antenna having switchable beamwidth --- with truncated concave ellipsoid subreflector
- [NASA-CASE-GSC-11760-1] c33 N75-19516
- SUBSONIC FLOW**
- Leading edge vortex flaps for drag reduction --- during subsonic flight
- [NASA-CASE-LAR-12750-1] c02 N81-19016
- SUBSONIC SPEED**
- Aerospace vehicle with variable planform for hypersonic and subsonic flight
- [NASA-CASE-XLA-00805] c31 N70-38010
- Construction of leading edges of surfaces for aerial vehicles performing from subsonic to above transonic speeds
- [NASA-CASE-XLA-01486] c01 N71-23497
- Airfoil shape for flight at subsonic speeds --- design analysis and aerodynamic characteristics of the GAN-1 airfoil
- [NASA-CASE-LAR-10585-1] c02 N76-22154
- Self stabilizing sonic inlet
- [NASA-CASE-LRW-11890-1] c05 N79-24976
- SUBSONIC WIND TUNNELS**
- Variable geometry wind tunnel for testing aircraft models at subsonic speeds
- [NASA-CASE-XLA-07430] c11 N72-22246
- SUBSTRATES**
- Means and methods of depositing thin films on substrates
- [NASA-CASE-XNP-00595] c15 N70-34967
- Fabrication of solar cell banks for attaching solar cells to base members or substrates
- [NASA-CASE-XNP-00826] c03 N71-20895
- Method and apparatus for fabricating solar cell panels
- [NASA-CASE-XNP-03413] c03 N71-26726
- Fabrication of polycrystalline solar cells on low-cost substrates
- [NASA-CASE-GSC-12022-1] c44 N76-28635
- Process for producing a well-adhered durable optical coating on an optical plastic substrate --- abrasion resistant polymethyl methacrylate lenses
- [NASA-CASE-ARC-11039-1] c74 N78-32854
- Attaching of strain gages to substrates
- [NASA-CASE-FRC-10093-1] c35 N80-20560
- Pyroelectric detector arrays
- [NASA-CASE-LAR-12363-1] c35 N81-12389
- Method for applying photographic resists to otherwise incompatible substrates
- [NASA-CASE-MSC-18107-1] c27 N81-25209
- Densification of porous refractory substrates --- space shuttle orbiter tiles
- [NASA-CASE-MSC-18737-1] c25 N81-29180
- Method of repairing surface damage to porous refractory substrates --- shuttle orbiter tiles
- [NASA-CASE-MSC-18736-1] c27 N81-29231
- SUBSTRUCTURES**
- Supporting structure for simultaneous exposure of pellets to X rays
- [NASA-CASE-XNP-06031] c15 N71-15606
- Opto-mechanical subsystem with temperature compensation through isothermal design
- [NASA-CASE-GSC-12059-1] c35 N77-27366
- System for detecting substructure microfractures and method therefore
- [NASA-CASE-NPO-14192-1] c39 N80-10507
- SULFATES**
- Nitroaniline sulfate, intumescent paints
- [NASA-CASE-ARC-10099-1] c18 N71-15469
- SULFONES**
- Electrolytic cell structure
- [NASA-CASE-LAR-11042-1] c33 N75-27252
- SULFONIC ACID**
- Intumescent coatings containing 4,4'-dinitrosulfanilide
- [NASA-CASE-ARC-11042-1] c24 N78-14096
- SULFUR COMPOUNDS**
- Mercaptan terminated polymer containing sulfonic acid salts of nitrosubstituted aromatic amines for heat and moisture resistant coatings
- [NASA-CASE-ARC-10325] c06 N72-25147
- SULFUR DIOXIDES**
- Stack plume visualization system
- [NASA-CASE-LAR-11675-1] c45 N76-17656
- Simultaneous treatment of SO2 containing stack gases and waste water
- [NASA-CASE-MSC-16258-1] c45 N79-12584
- SULFURIC ACID**
- An improved synthesis of 2, 4, 8, 10-tetroxaspiro (5.5)undecane
- [NASA-CASE-ARC-11243-1] c27 N79-30375
- Potential heat exchange fluids for use in sulfuric acid vaporizers
- [NASA-CASE-NPO-15015-1] c25 N80-23394
- An improved synthesis of 2,4,8,10-tetroxaspiro (5.5) undecane
- [NASA-CASE-ARC-11243-2] c23 N80-31472
- SUM RULES**
- Describing circuit for obtaining sum of squares of numbers
- [NASA-CASE-XGS-04765] c08 N71-18693
- SUN**
- Sun tracking solar energy collector
- [NASA-CASE-NPO-13921-1] c44 N79-14526
- SUNGLASSES**
- Pliable frame for sunglasses in emergency survival kits
- [NASA-CASE-XMS-06064] c05 N71-23096
- SUNLIGHT**
- Illumination system design for use as sunlight simulator in space environment simulators with multiple light sources reflected to single virtual source
- [NASA-CASE-HQN-10781] c23 N71-30292
- Illumination control apparatus for compensating solar light
- [NASA-CASE-KSC-11010-1] c74 N79-12890

SUPERCHARGERS

- Supercharged topping rocket propellant feed system
[NASA-CASE-XLE-02062-1] c20 N80-14188
- Diesel engine catalytic combustor system --- turbocharging
[NASA-CASE-LEW-12995-1] c37 N80-26659

SUPERCONDUCTING MAGNETS

- Cryogenic flux-gated magnetometer using superconductors
[NASA-CASE-XAC-02407] c14 N69-27423
- Improved alternator with windings of superconducting materials acting as permanent magnet
[NASA-CASE-XLE-02824] c03 N69-39890
- Segmented superconducting magnet producing staggered magnetic field and suitable for broadband traveling wave masers
[NASA-CASE-XGS-10518] c16 N71-28554
- Operating properties of superconducting magnet in vacuum environment
[NASA-CASE-XNP-06503] c23 N71-29049
- Magnetometer using superconducting rotating body
[NASA-CASE-NPO-13388-1] c35 N76-16390
- Stable superconducting magnet --- high current levels below critical temperature
[NASA-CASE-XNP-05373-1] c33 N79-21264

SUPERCONDUCTIVITY

- Superconducting alternator design with cryogenic fluid for cooling windings below critical temperature
[NASA-CASE-XLE-02823] c09 N71-23443
- Superconductive resonant cavity for improved signal to noise ratio in communication signal
[NASA-CASE-MSC-12259-2] c07 N72-33146
- Superconducting magnetic field trapping device for producing magnetic field in air
[NASA-CASE-XNP-01185] c26 N73-28710
- Doped Josephson tunneling junction for use in a sensitive IR detector
[NASA-CASE-NPO-13348-1] c33 N75-31332

SUPERCONDUCTORS

- Superconductive accelerometer employing variable force principle to determine acceleration of bodies
[NASA-CASE-XMF-01099] c14 N71-15969
- Controlled diffusion reaction process for masking substrate of twisted multifilament superconductive ribbon
[NASA-CASE-LEW-11726-1] c26 N73-26752
- Twisted wire or tube superconductor for filament windings
[NASA-CASE-LEW-11015] c26 N73-32571
- Germanium coated microbridge and method
[NASA-CASE-MFS-23274-1] c33 N78-13320
- Superconducting gyrocon for high power high efficiency microwave generator/amplifier application
[NASA-CASE-NPO-14975-1] c33 N80-29584

SUPERCOOLING

- Superconducting gyrocon for high power high efficiency microwave generator/amplifier application
[NASA-CASE-NPO-14975-1] c33 N80-29584
- Method and apparatus for supercooling and solidifying substances --- containless melts and space processing
[NASA-CASE-MFS-25242-1] c35 N81-24413

SUPERFLUIDITY

- Helium refining by superfluidity
[NASA-CASE-XNP-00733] c06 N70-34946
- Method and apparatus for generating coherent radiation in the ultra-violet region and above by use of distributed feedback
[NASA-CASE-NPO-13346-1] c36 N76-29575

SUPERHEATING

- Thermal energy storage system --- operating on superheating of liquids
[NASA-CASE-MFS-23167-1] c44 N76-31667

SUPERHIGH FREQUENCIES

- Dual band combiner for horn antenna
[NASA-CASE-NPO-14519-1] c32 N80-23524

SUPERPLASTICITY

- Superplastically formed diffusion bonded metallic structure
[NASA-CASE-FRC-11026-1] c39 N79-25424

SUPERSONIC AIRCRAFT

- Variable sweep wing configuration for supersonic aircraft
[NASA-CASE-XLA-00230] c02 N70-33255

- Supersonic aircraft variable sweep wing planform for varying aspect ratio
[NASA-CASE-XLA-00350] c02 N70-38011
 - Development and characteristics of variable sweep wing control system for supersonic aircraft
[NASA-CASE-XLA-03659] c02 N71-11041
 - Development and characteristics of translating horizontal tail assembly for supersonic aircraft
[NASA-CASE-XLA-08801-1] c02 N71-11043
 - Design of supersonic aircraft with novel fixed, swept wing planform
[NASA-CASE-XLA-04451] c02 N71-12243
 - Absorptive, nonreflecting barrier mounted between closely spaced jet engines on supersonic aircraft, for preventing shock wave interference
[NASA-CASE-XLA-02865] c28 N71-15563
 - Oblique-wing supersonic aircraft
[NASA-CASE-ARC-10470-3] c05 N76-29217
- SUPERSONIC COMBUSTION**
- Supersonic-combustion rocket
[NASA-CASE-LEW-11058-1] c20 N74-13502
 - Hypersonic airbreathing missile
[NASA-CASE-LAR-12264-1] c15 N78-32168
- SUPERSONIC DRAG**
- Bluff-shaped annular configuration for supersonic decelerator for reentry vehicles
[NASA-CASE-XLE-00222] c02 N70-37539
- SUPERSONIC FLIGHT**
- Variable aspect ratio and variable sweep delta wing planforms for supersonic aircraft
[NASA-CASE-XLA-00221] c02 N70-33266
 - Supersonic or hypersonic vehicle control system comprising elevons with hinge line sweep and free of adverse aerodynamic cross coupling
[NASA-CASE-XLA-08967] c02 N71-27088
- SUPERSONIC FLOW**
- Optical sensing of supersonic flows by correlating deflections in laser beams through flow
[NASA-CASE-MFS-20642] c14 N72-21407
 - Stagnation pressure probe --- for measuring pressure of supersonic gas streams
[NASA-CASE-LAR-11139-1] c35 N74-32878
- SUPERSONIC INLETS**
- Airflow control system for supersonic inlets
[NASA-CASE-LEW-11188-1] c02 N74-20646
 - Shock position sensor for supersonic inlets --- measuring pressure in the throat of a supersonic inlet
[NASA-CASE-LEW-11915-1] c35 N76-14431
 - Hypersonic airbreathing missile
[NASA-CASE-LAR-12264-1] c15 N78-32168
- SUPERSONIC NOZZLES**
- Penshaped, supersonic exhaust nozzle design
[NASA-CASE-XLE-00057] c28 N70-38711
 - Telescoping-spike supersonic nozzle for turbojet or ramjet engines
[NASA-CASE-XLE-00005] c28 N70-39899
 - Electric arc heater with supersonic nozzle and fixed arc length for use in high temperature wind tunnels
[NASA-CASE-XAC-01677] c09 N71-20816
 - Aircraft engine nozzle
[NASA-CASE-ARC-10977-1] c07 N80-32392
- SUPERSONIC SPEEDS**
- Continuous operation, single phased, induction plasma accelerator producing supersonic speeds
[NASA-CASE-XLA-01354] c25 N70-36946
 - Static pressure probe
[NASA-CASE-LAR-11552-1] c35 N76-14429
- SUPERSONIC TRANSPORTS**
- Position locating system for remote aircraft using voice communication and digital signals
[NASA-CASE-GSC-10087-2] c21 N71-13958
 - Traffic control system for supersonic transports using synchronous satellite for data relay between vehicles and ground station
[NASA-CASE-GSC-10087-1] c02 N71-19287
 - System and method for position locating for air traffic control involving supersonic transports
[NASA-CASE-GSC-10087-3] c07 N72-12080
 - Doppler compensated communication system for locating supersonic transport position
[NASA-CASE-GSC-10087-4] c07 N73-20174
 - Supersonic transport --- using canard surfaces
[NASA-CASE-LAR-11932-1] c05 N78-32086

SUPERSONIC WIND TUNNELS

Wind tunnel
[NASA-CASE-LAR-10135-1] c09 N79-21083
A rectangular rod-wall sound shield
[NASA-CASE-LAR-12883-1] c09 N81-29138
SUPPORT INTERFERENCE
Spherical bearing --- to reduce vibration effects
[NASA-CASE-MFS-23447-1] c37 N79-11404
SUPPORT SYSTEMS
Hydraulic support apparatus for dynamic testing of space vehicles under near-free flight conditions
[NASA-CASE-XMF-03248] c11 N71-10604
Supporting structure for simultaneous exposure of pellets to X rays
[NASA-CASE-XMF-06031] c15 N71-15606
Multilegged support system for wind tunnel test models subjected to thermal dynamic loading
[NASA-CASE-XLA-01326] c11 N71-21481
Adjustable support device with jacket screw for altering distance between base and supported member
[NASA-CASE-NPO-10721] c15 N72-27484
Hydrostatic bearing support
[NASA-CASE-LEW-11158-1] c37 N77-28486
Metric half-span model support system
[NASA-CASE-LAR-12441-1] c09 N80-24334
SUPPORTS
Support techniques for restraint of slender bodies such as launch vehicles
[NASA-CASE-XLA-02704] c11 N69-21540
Pneumatic control of telescopic mirror support system
[NASA-CASE-XLA-03271] c11 N69-24321
Optical scanner mounted on rotating support structure with method of compensating for image or satellite rotation
[NASA-CASE-XGS-02401] c14 N69-27485
Support for flexible conductor cable between drawers or racks holding electronic equipment and cabinet assembly housing drawers or racks
[NASA-CASE-XMF-07587] c15 N71-18701
Swivel support for gas bearing for position adjustment between ball and supporting cup
[NASA-CASE-XMF-07808] c15 N71-23812
Tracking mount for laser telescope employed in tracking large rockets and space vehicles to give information regarding azimuth and elevation
[NASA-CASE-MFS-14017] c14 N71-26627
Gas bearing for model support with capacity for measuring angular displacement of model in bearing
[NASA-CASE-XLA-09346] c15 N71-28740
Adjustable rigid mount for trihedral mirror formed of alloy with small coefficient of thermal expansion supporting screws and spring-biased plates
[NASA-CASE-XMF-08907] c23 N71-29123
Slotted fine-adjustment support for optical devices
[NASA-CASE-MFS-20249] c15 N72-11386
Base support for expansible and contractible coupling between two members
[NASA-CASE-NPO-11059] c15 N72-17454
Optical mirror support system
[NASA-CASE-XER-07896-2] c23 N72-22673
Fixture for supporting articles during vibration tests comprising integral annular unit
[NASA-CASE-MFS-20523] c14 N72-27412
Design and development of test stand system for supporting test items in vacuum chamber
[NASA-CASE-MFS-21362] c11 N73-20267
Collapsible support for antenna reflector applied to installation of spacecraft antennas
[NASA-CASE-NPO-11751] c07 N73-24176
Method of making porous conductive supports for electrodes --- by electroforming and stacking nickel foils
[NASA-CASE-GSC-11367-1] c44 N74-19692
Thrust-isolating mounting --- characteristics of support for loads mounted in spacecraft
[NASA-CASE-MFS-21680-1] c18 N74-27397
Variable contour securing system
[NASA-CASE-MSC-16270-1] c37 N78-27423
Heat treat fixture and method of heat treating
[NASA-CASE-LAR-11821-1] c26 N80-28492
Locking mechanism for orthopedic braces
[NASA-CASE-GSC-12082-2] c52 N81-25661

SUPPRESSORS

Electronic background suppression field scanning sensor for detecting point source targets
[NASA-CASE-XGS-05211] c07 N69-39980

SURFACE ACOUSTIC WAVE DEVICES

Distributed feedback acoustic surface wave oscillator
[NASA-CASE-NPO-13673-1] c71 N77-26919

SURFACE DEFECTS

Surface defect detection by reflected microwave radiation pattern
[NASA-CASE-AEC-10009-1] c15 N71-17822
Method and device for detection of surface discontinuities or defects
[NASA-CASE-MSC-14187-1] c35 N74-32879
Method of repairing surface damage to porous refractory substrates --- shuttle orbiter tiles
[NASA-CASE-MSC-18736-1] c27 N81-29231

SURFACE DIFFUSION

Metallic film diffusion into metal or ceramic surfaces for boundary lubrication in aerospace environments
[NASA-CASE-XLF-01765] c18 N71-10772
Double-beam optical method and apparatus for measuring thermal diffusivity and other molecular dynamic processes in utilizing the transient thermal lens effect
[NASA-CASE-NFO-14657-1] c74 N81-17887

SURFACE FINISHING

Development of procedure for producing thin transparent films of zinc oxide on transparent refractory substrate
[NASA-CASE-FRC-10019] c15 N73-12487
Device and method for determining X ray reflection efficiency, scattering properties, and surface finish of optical surfaces
[NASA-CASE-MFS-20243] c23 N73-13662
Surface finishing --- for aircraft wings
[NASA-CASE-MSC-12631-1] c24 N77-28225
Modification of the electrical and optical properties of polymers --- ion irradiation to create texture
[NASA-CASE-LEW-13027-1] c27 N80-24437
Surface finishing
[NASA-CASE-MSC-12631-3] c27 N81-14077
Method of cold welding using ion beam technology
[NASA-CASE-LEW-12982-1] c37 N81-19455
Laser surface fusion of plasma sprayed ceramic turbine seals
[NASA-CASE-LEW-13269-1] c27 N81-22190

SURFACE IONIZATION

Electrodes having array of small surfaces for field ionization
[NASA-CASE-ERC-10013] c09 N71-26678
Development of method and apparatus for detecting surface ions on silicon diodes and transistors
[NASA-CASE-ERC-10325] c15 N72-25457

SURFACE LAYERS

Bismuth and lead surface coatings for gas bearings in aerospace engineering
[NASA-CASE-XGS-02011] c15 N71-20739
Method and apparatus for stable silicon dioxide layers on silicon grown in silicon nitride ambient
[NASA-CASE-ERC-10073-1] c24 N74-19769

SURFACE PROPERTIES

Anti-wettable materials brazing processes using titanium and zirconium for surface pretreatment
[NASA-CASE-XMS-03537] c15 N69-21471
Ablation article and surface for analyzing flow transition on ablative surface
[NASA-CASE-LAR-10439-1] c33 N73-27796
Dual measurement ablation sensor
[NASA-CASE-LAR-10105-1] c34 N74-15652
Apparatus for scanning the surface of a cylindrical body
[NASA-CASE-NPO-11861-1] c36 N74-20009
Apparatus for microbiological sampling --- including automatic swabbing
[NASA-CASE-LAR-11069-1] c35 N75-12272
Penetrometer --- for determining load bearing characteristics of inclined surfaces
[NASA-CASE-NPO-11103-1] c35 N77-27367
Device for measuring the contour of a surface
[NASA-CASE-LAR-11869-1] c74 N78-27904
Displacement probes with self-contained exciting medium
[NASA-CASE-LAR-11690-1] c35 N80-14371

Apparatus for electrolytically tapered or contoured cavities
[NASA-CASE-XNP-08835-1] c37 N80-14395

Mechanical bending of metal
[NASA-CASE-LEW-12941-1] c31 N81-16329

Tactile sensing system --- manipulator controllers
[NASA-CASE-NPO-15094-1] c33 N81-16386

SURFACE REACTIONS
Chemical spot test for identifying magnesium or magnesium alloys used in aerospace applications
[NASA-CASE-LAR-10953-1] c17 N73-27446

SURFACE ROUGHNESS
Roughness detector for recording surface pattern of irregularities
[NASA-CASE-XLA-00203] c14 N70-34161

Optical apparatus for visual detection of roundness and regularity of cone surfaces
[NASA-CASE-XNP-00462] c14 N70-34298

Describing device for surveying contour of surface using X-Y plotter and traveling transducer
[NASA-CASE-XLA-08646] c14 N71-17586

Surface roughness measuring system --- synthetic aperture radar measurements of ocean wave height and terrain peaks
[NASA-CASE-NPO-13862-1] c35 N79-10391

Texturing polymer surfaces by transfer casting --- cardiovascular prosthesis
[NASA-CASE-LEW-13120-1] c31 N81-16327

SURFACE ROUGHNESS EFFECTS
Aerodynamically stable meteorological balloon using surface roughness effect
[NASA-CASE-XNP-04163] c02 N71-23C07

SURFACE TEMPERATURE
Curved film cooling admission tube
[NASA-CASE-LEW-13174-1] c34 N81-12363

SURFACE VEHICLES
Optimal control system for automatic speed regulation of electric driven motor vehicle
[NASA-CASE-NPO-11210] c11 N72-20244

Self-propelled vehicle with wheel, track laying, and walking capability for exploratory exploration
[NASA-CASE-NPO-11366] c11 N73-26238

Short range laser obstacle detector --- for surface vehicles using laser diode array
[NASA-CASE-NPO-11856-1] c36 N74-15145

Vehicle locating system utilizing AM broadcasting station carriers
[NASA-CASE-NPO-13217-1] c32 N75-26194

Vehicular impact absorption system
[NASA-CASE-NPO-14014-1] c37 N79-10420

SURFACE WAVES
Development of method for suppressing excitation of electromagnetic surface waves on dielectric converter antenna
[NASA-CASE-XLA-10772] c07 N71-28980

SURFACES
Techniques for recovery of multistage rocket vehicles by providing lifting surfaces on individual sections
[NASA-CASE-XNP-00389] c31 N70-34176

Kinetic and static friction force measurement between magnetic tape and magnetic head surfaces
[NASA-CASE-XNP-08680] c14 N71-22995

Three-axis adjustable loading structure
[NASA-CASE-FRC-10051-1] c35 N74-13129

Photoelectron spectrometer with means for stabilizing sample surface potential
[NASA-CASE-NFO-13772-1] c35 N78-10429

SURFACTANTS
Surfactant-assisted liquefaction of particulate carbonaceous substances
[NASA-CASE-NPO-13904-1] c25 N79-11152

SURGERY
Tissue macerating instrument
[NASA-CASE-LEW-12668-1] c52 N78-14773

Intra-ocular pressure normalization technique and equipment
[NASA-CASE-LEW-12955-1] c52 N80-14684

SURGES
Silicon controlled rectifier inverter with compensation of transients to avoid false gating
[NASA-CASE-XLA-06507] c09 N69-35584

Turn on current transient limiter for controlling peak current flow in high capacity load
[NASA-CASE-GSC-10413] c10 N71-26531

SURGICAL INSTRUMENTS

Ultrasonic device for ophthalmic eye surgery with safe removal of macerated material
[NASA-CASE-LEW-11669-1] c05 N73-27062

Ophthalmic liquifaction pump
[NASA-CASE-LEW-12051-1] c52 N75-33640

SURVIVAL EQUIPMENT

Survival couch for aircraft or spacecraft crews
[NASA-CASE-XLA-00118] c05 N70-33285

Lightweight life preserver without fastening devices
[NASA-CASE-XMS-00864] c05 N70-36493

Pliable frame for sunglasses in emergency survival kits
[NASA-CASE-XMS-06064] c05 N71-23096

SUSPENDING (HANGING)

Parallel motion suspension device for measuring instruments
[NASA-CASE-XNP-01567] c15 N70-41310

Cable suspension and inclined walkway system for simulating reduced or zero gravity environments
[NASA-CASE-XLA-01787] c11 N71-16028

Suspended mass oscillation damper based on impact energy absorption for damping wind induced oscillations of tall stacks, antennas, and umbilical towers
[NASA-CASE-LAR-10193-1] c15 N71-27146

SUSPENSION SYSTEMS (VEHICLES)

An improved suspension system for a wheel rolling on a flat track --- bearings for directional antennas
[NASA-CASE-NPO-14395-1] c37 N79-12446

SWEAT

Sweat collection capsule
[NASA-CASE-ARC-11031-1] c52 N81-29763

SWEAT COOLING

Transpiration cooled turbine blade made from metallic or ceramic wires
[NASA-CASE-XLE-00020] c15 N70-33226

Transpirationally cooled heat ablation system for interplanetary spacecraft reentry shielding
[NASA-CASE-XMS-02677] c31 N70-42075

Method of electroforming a rocket chamber
[NASA-CASE-LEW-11118-1] c20 N74-32919

SWEEP CIRCUITS

Transistorized circuit for producing multiple slope voltage sweep
[NASA-CASE-XMS-03542] c09 N71-28926

SWEEP EFFECT

Supersonic or hypersonic vehicle control system comprising elevons with hinge line sweep and free of adverse aerodynamic cross coupling
[NASA-CASE-XLA-08967] c02 N71-27088

Acoustically swept rotor --- helicopter noise reduction
[NASA-CASE-ARC-11106-1] c05 N80-14107

SWEEP FREQUENCY

Swept group delay measurement
[NASA-CASE-NFO-13909-1] c33 N78-25319

SWELLING

Para-benzoquinone dioxime and concentrated mineral acid processed to yield intumescent or fire resistant, heat insulating materials
[NASA-CASE-ARC-10304-1] c18 N73-26572

SWEEP WINGS

Design of supersonic aircraft with novel fixed, swept wing planform
[NASA-CASE-XLA-04451] c02 N71-12243

Leading edge vortex flaps for drag reduction --- during subsonic flight
[NASA-CASE-LAR-12750-1] c02 N81-19016

SWIRLING

Slosh and swirl alleviator for liquid propellant tanks during transport and flight
[NASA-CASE-XLA-05749] c15 N71-19569

Swirl can, full-annulus combustion chambers for high performance gas turbine engines
[NASA-CASE-LEW-11326-1] c23 N73-30665

SWITCHES

Switching mechanism with energy stored in coil spring
[NASA-CASE-XGS-00473] c03 N70-38713

Digital memory system with multiple switch cores for driving each word location
[NASA-CASE-XNP-01466] c10 N71-26434

Radio frequency controlled solid state switch
[NASA-CASE-ARC-10136-1] c09 N72-22202

High power BP coaxial switch
[NASA-CASE-NFO-14229-1] c33 N80-18285

Fiber optic crossbar switch for automatically patching optical signals
[NASA-CASE-KSC-11104-1] c74 N81-12862

SWITCHING CIRCUITS

Solid state switching circuit design to increase current capacity of low rated relay contacts
[NASA-CASE-XNP-09228] c09 N69-27500

Power control switching circuit using low voltage semiconductor controlled rectifiers for high voltage isolation
[NASA-CASE-XNP-02713] c10 N69-39888

Selective gold diffusion on monolithic silicon chips for switching and nonswitching amplifier devices and circuits and linear and digital logic circuits
[NASA-CASE-ERC-10072] c09 N70-11148

Electrical power system for space flight vehicles operating over extended periods
[NASA-CASE-XMF-00517] c03 N70-34157

High speed low level voltage commutating switch
[NASA-CASE-XAC-00060] c09 N70-39915

Switching circuit with regeneratively connected transistors eliminating power consumption when not in use
[NASA-CASE-XNP-02654] c10 N70-42032

Using electron beam switching for brushless motor commutation
[NASA-CASE-XGS-01451] c09 N71-10677

Increasing power conversion efficiency of electronic amplifiers by power supply switching
[NASA-CASE-XMS-00945] c09 N71-10798

Silicon controlled rectifier pulse gate amplifier for blocking false gating caused by negative transient voltages
[NASA-CASE-XLA-07497] c09 N71-12514

Describing magnetic core current switching device for steering bipolar current pulses to memory units
[NASA-CASE-NPO-10201] c08 N71-18694

Transistorized dc-coupled multivibrator with noninverted output signal
[NASA-CASE-XNP-09450] c10 N71-18723

Reversible current directing circuitry for reversible motor control
[NASA-CASE-XLA-09371] c10 N71-18724

Constructing Exclusive-Or digital logic circuit in single module
[NASA-CASE-XLA-07732] c08 N71-18751

Polarization diversity monopulse tracking receiver design without radio frequency switches
[NASA-CASE-XGS-03501] c09 N71-20864

Sight switch using infrared source and sensor mounted beside eye
[NASA-CASE-XNP-03934] c09 N71-22985

Complementary regenerative transistorized switch circuit employing positive and negative feedback
[NASA-CASE-XGS-02751] c09 N71-23015

Reliable magnetic core circuit apparatus with application in selection matrices for digital memories
[NASA-CASE-XNP-01318] c10 N71-23033

Electric circuit for producing high current pulse having fast rise and fall time
[NASA-CASE-XMS-04919] c09 N71-23270

Electric circuit for reversing direction of current flow
[NASA-CASE-XNP-00952] c10 N71-23271

Switching series regulator with gating control network
[NASA-CASE-XMS-09352] c09 N71-23316

Microwave waveguide switch with rotor position control
[NASA-CASE-XNP-06507] c09 N71-23548

Signaling summary alarm circuit with semiconductor switch for faulty contact indications
[NASA-CASE-XLE-03061-1] c10 N71-24798

Solid state circuit for switching alternating current input signal as function of direct current gating transistor
[NASA-CASE-XNP-06505] c10 N71-24799

Inverters for changing direct current to alternating current
[NASA-CASE-XGS-06226] c10 N71-25950

Design and development of multistage current steering switch with inductively coupled magnetic cores
[NASA-CASE-XNP-08567] c09 N71-26000

Pulse duration control device for driving slow response time loads in selected sequence including switching and delay circuits and magnetic storage
[NASA-CASE-XGS-04224] c10 N71-26418

Turn on current transient limiter for controlling peak current flow in high capacity load
[NASA-CASE-GSC-10413] c10 N71-26531

Input radio frequency circuit for switching type absolute temperature measuring radiometer for noise sources
[NASA-CASE-ERC-11020] c14 N71-26774

Inverter drive circuit for semiconductor switch
[NASA-CASE-LEW-10233] c10 N71-27126

Phase locked demodulator with bandwidth switching amplifier circuit
[NASA-CASE-XNP-01107] c10 N71-28859

Monostable multivibrator for producing output pulse widths with positive feedback NOR gates
[NASA-CASE-HSC-13492-1] c10 N71-28860

Digital magnetic core memory with sensing amplifier circuits
[NASA-CASE-XNP-01012] c08 N71-28925

Current regulating voltage divider design with load current shunting
[NASA-CASE-HFS-20935] c09 N71-34212

Relay controlled voltage switching unit for scanning circuitry of star tracker
[NASA-CASE-NPO-11253] c09 N72-17157

Spacecraft solar cell system with switching circuit to provide compensation for environmental changes
[NASA-CASE-GSC-10669-1] c03 N72-20031

Flow rate switch for detecting variations in fluid flow velocity through conduits of pressurized systems
[NASA-CASE-NFO-10722] c09 N72-20199

Switching type voltage regulator with relatively simple circuit arrangement
[NASA-CASE-LEW-11005-1] c09 N72-21243

Development and characteristics of data multiplexer circuit using field effect transistors arranged in tree switching configuration
[NASA-CASE-NFO-11333] c08 N72-22162

Pulse coupling circuit with switch between generator and winding
[NASA-CASE-LEW-10433-1] c09 N72-22197

Solid state remote circuit selector switching circuit
[NASA-CASE-LEW-10387] c09 N72-22201

Pressure operated electrical switch responsive to pressure decrease after pressure increase
[NASA-CASE-LAR-10137-1] c09 N72-22204

Transistorized switching logic circuits with tunnel diodes
[NASA-CASE-GSC-10878-1] c10 N72-22236

Switching circuit for control of cathode ray tube beam with fast rise time for output signal
[NASA-CASE-KSC-10647-1] c10 N72-31273

Electronic video editor for switching video input signals to common output channel
[NASA-CASE-KSC-10003] c10 N73-13235

Solid state switch for variable circuit switching
[NASA-CASE-NFO-10817-1] c08 N73-30135

Transparent switchboard which permits optical display devices to be adapted for use in man machine communications
[NASA-CASE-HSC-13746-1] c10 N73-32143

High isolation RF signal selection switches
[NASA-CASE-NFO-13081-1] c33 N74-22814

Isolated output system for a class D switching-mode amplifier
[NASA-CASE-HFS-21616-1] c33 N75-30429

Dual digital video switcher
[NASA-CASE-KSC-10782-1] c33 N75-30431

Multi-computer multiple data path hardware exchange system
[NASA-CASE-NFO-13422-1] c60 N76-14818

Sustained arc ignition system
[NASA-CASE-LEW-12444-1] c33 N77-28385

Window comparator
[NASA-CASE-FRC-10090-1] c33 N78-18308

Module failure isolation circuit for paralleled inverters --- preventing system failure during power conditioning for spacecraft applications
[NASA-CASE-NFO-14000-1] c33 N79-24254

- System for automatically switching transformer coupled lines
[NASA-CASE-MSC-16697-1] c33 N79-28415
- Self-reconfiguring scalar cell system
[NASA-CASE-LEW-12586-1] c44 N80-14472
- Microwave switching power divider --- for use in Earth orbiting satellites having spherical multi-element antenna arrays
[NASA-CASE-GSC-12420-1] c33 N80-21670
- Control means for a solid state crossbar switch
[NASA-CASE-NPO-15066-1] c33 N80-33679
- Fiber optic crossbar switch for automatically patching optical signals
[NASA-CASE-KSC-11104-1] c74 N81-12662
- Push-pull converter with energy saving circuit for protecting switching transistors from peak power stress
[NASA-CASE-NPO-14316-1] c33 N81-33404
- SWITCHING THEORY**
Multiple circuit switch apparatus requiring minimum hand and eye movement by operator
[NASA-CASE-XAC-03777] c10 N71-15909
- SWIVELS**
Swivel support for gas bearing for position adjustment between ball and supporting cup
[NASA-CASE-XMP-07808] c15 N71-23612
- SYNCHRONISM**
Synchronizing apparatus for multi-access satellite time division multiplex system
[NASA-CASE-XGS-05918] c07 N69-35574
- Circuitry for generating sync signals in FM communication systems including video information
[NASA-CASE-XNP-10830] c07 N71-11281
- Development of method for synchronizing clocks at several ground stations based on signals received from spacecraft or satellites
[NASA-CASE-XNP-08875] c10 N71-23099
- Pulse generator for synchronizing or resetting electronic signals without requiring separate external source
[NASA-CASE-XGS-03632] c09 N71-23311
- Time synchronization system for synchronizing clocks at remote locations with master clock using moon reflected coded signals
[NASA-CASE-NPO-10143] c10 N71-26326
- System designed to reduce time required for obtaining synchronization in data communication with spacecraft utilizing pseudonoise codes
[NASA-CASE-NPO-10214] c10 N71-26577
- SYNCHRONIZED OSCILLATORS**
Development of phase demodulation system with two phase locked loops
[NASA-CASE-XNP-00777] c10 N71-15469
- Phase locked phase modulation system with voltage controlled oscillator for final phase linearity
[NASA-CASE-XNP-05382] c10 N71-23544
- Automatic frequency control device for providing frequency reference for voltage controlled oscillator
[NASA-CASE-KSC-10393] c09 N72-21247
- SYNCHRONIZERS**
Development and characteristics of burst synchronization detection system
[NASA-CASE-XMS-05605-1] c10 N71-19468
- Time division relay synchronizer with master sync pulse for activating binary counter to produce signal identifying time slot for station
[NASA-CASE-GSC-10373-1] c07 N71-19773
- Design and development of synchronous servo loop control system
[NASA-CASE-XNP-03744] c10 N71-20448
- Digital synchronizer for extracting binary data in receiver of PSK/FM communication system
[NASA-CASE-NPO-10851] c07 N71-24613
- Video sync processor with phase locked system
[NASA-CASE-KSC-10002] c10 N71-25665
- Pulse code modulated signal synchronizer
[NASA-CASE-MSC-12462-1] c32 N74-20809
- Pulse code modulated signal synchronizer
[NASA-CASE-MSC-12494-1] c32 N74-20810
- System for generating timing and control signals
[NASA-CASE-NPO-13125-1] c33 N75-19519
- Telemetry synchronizer
[NASA-CASE-GSC-11868-1] c17 N76-22245
- Memory-based frame synchronizer --- for voice data processing in digital communication systems
[NASA-CASE-GSC-12430-1] c32 N80-20453
- SYNCHRONOUS MOTORS**
Synchronous dc direct-drive system comprising multiple-loop hybrid control system controlling load directly connected to actuator
[NASA-CASE-GSC-10065-1] c10 N71-27136
- Motor run-up system --- power lines
[NASA-CASE-NPO-13374-1] c33 N75-19524
- SYNCHRONOUS SATELLITES**
Position locating system for remote aircraft using voice communication and digital signals
[NASA-CASE-GSC-10087-2] c21 N71-13958
- Serrodyne traveling wave tube reentrant amplifier for synchronous communication satellites operating at microwave frequencies
[NASA-CASE-XGS-01022] c07 N71-16088
- Traffic control system for supersonic transports using synchronous satellite for data relay between vehicles and ground station
[NASA-CASE-GSC-10087-1] c02 N71-19287
- Tracking antenna system with array for synchronous satellite or ground based radar
[NASA-CASE-GSC-10553-1] c07 N71-19854
- Satellite network synchronization system with multiple access to multiplex repeater
[NASA-CASE-GSC-10390-1] c07 N72-11149
- Development of device for simulating charge and discharge cycle of battery in synchronous orbit
[NASA-CASE-GSC-11211-1] c03 N72-25020
- Camera arrangement --- for satellite scanning of earth or sky
[NASA-CASE-GSC-12032-2] c35 N76-19408
- Systems and methods for determining radio frequency interference
[NASA-CASE-GSC-12150-1] c32 N79-11265
- Satellite personal communications system
[NASA-CASE-NPO-14480-1] c32 N80-20448
- SYNTHESIS**
Synthesis of polymeric schiff bases by schiff-base exchange reactions
[NASA-CASE-XMP-08651] c06 N71-11236
- Preparation of ordered poly(arylenesiloxane)/polymers
[NASA-CASE-XNP-10753] c06 N71-11237
- Synthesis and chemical properties of imidazopyrrolone/imide copolymers
[NASA-CASE-XLA-08802] c06 N71-11238
- Stable polyimide synthesis from mixtures of monomeric diamines and polycarboxylic acid esters
[NASA-CASE-LEW-11325-1] c06 N73-27980
- Synthesis of multifunction triaryltrifluoroethanes
[NASA-CASE-ARC-11097-1] c23 N78-22154
- Synthesis of multifunction triaryltrifluoroethanes
[NASA-CASE-ARC-11097-2] c23 N78-22155
- SYNTHESIS (CHEMISTRY)**
Synthesis of dawsonites
[NASA-CASE-ARC-113261-1] c25 N80-31490
- Prepolymer dianhydrides
[NASA-CASE-NPO-13899-1] c27 N80-32515
- Viscoelastic cationic polymers containing the urethane linkage
[NASA-CASE-NPO-10830-1] c27 N81-15104
- Bifunctional monomers having terminal oxime and cyano or amidine groups
[NASA-CASE-ARC-11253-3] c27 N81-24256
- Cross-linked polyvinyl alcohol and method of making same
[NASA-CASE-LEW-13504-1] c27 N81-27279
- SYNTHESIZERS**
Digitally controlled frequency synthesizer for pulse frequency modulation telemetry systems
[NASA-CASE-XGS-02317] c09 N71-23525
- SYNTHETIC APERTURE RADAR**
Surface roughness measuring system --- synthetic aperture radar measurements of ocean wave height and terrain peaks
[NASA-CASE-NPO-13862-1] c35 N79-10391
- Azimuth correlator for real-time synthetic aperture radar image processing
[NASA-CASE-NPO-14019-1] c32 N79-14268
- Multibeam single frequency synthetic aperture radar processor for imaging separate range swaths
[NASA-CASE-NPO-14525-1] c32 N79-19195
- Multibeam single frequency synthetic aperture radar processor for imaging separate range swaths
[NASA-CASE-NPO-14525-2] c32 N80-32607

- An electro-optical Doppler tracker means and method for optical correlation of synthetic aperture radar data
[NASA-CASE-NPO-14998-1] c33 N81-15194
- SYNTHETIC FIBERS**
Manufacture of fluid containers from fused coated polyester sheets having resealable septum
[NASA-CASE-NPO-10123] c15 N71-24835
Structure of fabric layers for micrometeoroid protection garment with capability for eliminating heat shorts for use in manufacturing space suits
[NASA-CASE-MSC-12109] c18 N71-26285
Flexible barrier membrane comprising porous substrate and incorporating liquid gallium or indium metal used as sealant barriers for spacecraft walls and pumping liquid propellants
[NASA-CASE-XNP-06881] c17 N71-28747
Polymeric electrolytic hygrometer
[NASA-CASE-NPO-13948-1] c35 N78-25391
Process for spinning flame retardant elastomeric compositions --- fabricating synthetic fibers for high oxygen environments
[NASA-CASE-MSC-14331-3] c27 N78-32262
Insoluble polyelectrolyte and ion-exchange hollow fiber impregnated therewith
[NASA-CASE-NPO-13530-1] c25 N81-17187
Method of carbonizing polyacrylonitrile fibers and resulting product
[NASA-CASE-ARC-11261-1] c24 N81-29164
- SYNTHETIC FUELS**
Solar-heated fluidized bed gasification system
[NASA-CASE-NPO-15071-1] c44 N80-24747
Molten salt pyrolysis of latex --- synthetic hydrocarbon fuel production using the Guayule shrub
[NASA-CASE-NPO-14315-1] c27 N81-17261
- SYNTHETIC RESINS**
Process permitting application of synthetic resin coating to irregular-shaped objects at ambient temperature
[NASA-CASE-XNP-06508] c18 N69-39895
Phosphorus-containing bisimide resins
[NASA-CASE-ARC-11321-1] c27 N81-27272
- SYNTHETIC RUBBERS**
Process for the preparation of polycarboranylphosphazenes --- thermal insulation
[NASA-CASE-ARC-11176-2] c27 N81-27271
- SYRINGES**
Micro-fluid exchange coupling apparatus
[NASA-CASE-ARC-11114-1] c51 N81-14605
Automated syringe sampler --- remote sampling of air and water
[NASA-CASE-LAR-12308-1] c35 N81-29407
- SYSTEM EFFECTIVENESS**
System for the measurement of ultra-low stray light levels --- determining the adequacy of large space telescope systems
[NASA-CASE-MFS-23513-1] c74 N79-11865
- SYSTEM FAILURES**
Tape recorder designed for low power consumption and resistance to operational failure under high stress conditions
[NASA-CASE-XGS-08259] c14 N71-23698
Fault tolerant clock apparatus utilizing a controlled minority of clock elements
[NASA-CASE-MSC-12531-1] c35 N75-30504
Apparatus for sensor failure detection and correction in a gas turbine engine control system
[NASA-CASE-LEW-12907-2] c07 N81-19115
- SYSTEMS ANALYSIS**
Analog to digital converter analyzing system
[NASA-CASE-NPO-10560] c08 N72-22166
- SYSTEMS ENGINEERING**
Design of magnetohydrodynamic induction machine with end poles which produce compensating magnetic fields
[NASA-CASE-XNP-07481] c25 N69-21929
Hovering type flying vehicle design and principle mechanisms for manned or unmanned use
[NASA-CASE-MSC-12111-1] c02 N71-11039
Solar battery with interconnecting means for plural cells
[NASA-CASE-XNP-06506] c03 N71-11050
Transparent polycarbonate resin, shell helmet and latch design for high altitude and space flight
- [NASA-CASE-XMS-04935] c05 N71-11190
Design and operation of multi-feed cone Cassegrain antenna
[NASA-CASE-NPO-10539] c07 N71-11285
Design and operation of viscous pendulum damper
[NASA-CASE-XLA-02079] c12 N71-16894
Alarm system design for monitoring one or more relay circuits
[NASA-CASE-XMS-10984-1] c10 N71-19417
Wide range analog data compression system
[NASA-CASE-XGS-02612] c08 N71-19435
Space suit body heat exchanger design composed of thermal conductance yarn and liquid coolant loops
[NASA-CASE-XMS-09571] c05 N71-19439
Silicon radiation detecting probe design for in vivo biomedical use
[NASA-CASE-XMS-01177] c05 N71-19440
Design and operation of high speed binary to decimal conversion system
[NASA-CASE-XGS-01230] c08 N71-19544
Spatier proof evaporant source design for use in vacuum deposition of solid thin films on substrates
[NASA-CASE-XNP-06065] c15 N71-20395
Method and apparatus for fabrication of heat insulating and ablative reentry structure
[NASA-CASE-XMS-02009] c33 N71-20834
Polarization diversity monopulse tracking receiver design without radio frequency switches
[NASA-CASE-XGS-03501] c09 N71-20864
Pneumatic cantilever beams and platform for space erectable structure
[NASA-CASE-XLA-01731] c32 N71-21045
Magnetically opened diaphragm design with camera shutter and expansion tube applications
[NASA-CASE-XLA-03660] c15 N71-21060
Portable apparatus producing high velocity annular air column surrounding low velocity, filtered, superclean air central core for industrial clean room environmental control
[NASA-CASE-XNP-03212] c15 N71-22721
Rotary spindle lathe attachments for machining geometrical cones
[NASA-CASE-XMS-04292] c15 N71-22722
Apparatus and method for spin forming tubular elbows with high strength, uniform thickness, and close tolerances
[NASA-CASE-XNP-01083] c15 N71-22723
Spacecraft air lock system to provide ingress and egress of astronaut without subjecting vehicular environment to vacuum of space
[NASA-CASE-XLA-02050] c31 N71-22968
Method of stationkeeping for lenticular gravity gradient satellites
[NASA-CASE-XLA-03132] c31 N71-22969
Filler valve design for supplying liquid propellants at high pressure to space vehicles
[NASA-CASE-XNP-01747] c15 N71-23024
Method and apparatus for producing very low temperature refrigeration based on gas pressure balance
[NASA-CASE-XNP-08877] c15 N71-23025
Monitoring circuit design for sampling circuit control and reduction of time-bandwidth in video communication systems
[NASA-CASE-XNP-02791] c07 N71-23026
Multisample test chamber for exposing materials to X rays, temperature change, and gaseous conditions and determination of material effects
[NASA-CASE-XMS-02930] c11 N71-23042
Variable duration pulse integrator design for integrating pulse duration modulated pulses with elimination of ripple content
[NASA-CASE-XLA-01219] c10 N71-23084
Sealed electrochemical cell with flexible casing for varying electrolyte level in cell
[NASA-CASE-XGS-01513] c03 N71-23336
Mosaic semiconductor radiation detector and position indicator systems engineering for low energy particles
[NASA-CASE-XGS-03230] c14 N71-23401
Device for measuring two orthogonal components of force with gallium flotation of measuring target for use in vacuum environments
[NASA-CASE-XAC-04885] c14 N71-23790
Transducer circuit design with single coaxial cable for input and output connections including incorporation into miniaturized

catheter transducer
[NASA-CASE-ABC-10132-1] c09 N71-24597

Method of attaching cover glass to silicon solar cell without using adhesive
[NASA-CASE-XLE-08569-2] c03 N71-24681

Development of attitude control system for sounding rocket stabilization during ballistic phase of flight
[NASA-CASE-XGS-01654] c31 N71-24750

Temperature telemetric transmitter with frequency determining tank circuit for short range transmission
[NASA-CASE-NPO-10649] c07 N71-24840

Tuning arrangement for frequency control of magnetron-type electron discharge device
[NASA-CASE-XNP-09771] c09 N71-24841

Broadband modified turnstile antenna for use in space tracking and communications
[NASA-CASE-MSC-12209] c09 N71-24842

Apparatus to determine electric field strength by measuring deflection of electron beam impinging on target
[NASA-CASE-XMF-06617] c09 N71-24843

Binary to decimal decoder logic circuit design with feedback control and display device
[NASA-CASE-XKS-06167] c08 N71-24890

Noninterruptable digital counter circuit design with display device for pulse frequency modulation
[NASA-CASE-XNP-05759] c08 N71-24891

Quick disconnect duct coupling device for single-handed operation
[NASA-CASE-MFS-20395] c15 N71-24903

Brushless dc tachometer design with Hall effect crystals and output voltage magnitude proportional to rotor speed
[NASA-CASE-MFS-20385] c09 N71-24904

Pneumatic mechanism for releasing hook and loop fasteners between large rigid structures
[NASA-CASE-XMS-10660-1] c15 N71-25975

Sealed fluorescent tube light unit capable of connection with other units to form string of work lights
[NASA-CASE-XKS-05932] c09 N71-26787

Apparatus for semiautomatic inspection of microfilmed documents for density, resolution, size, and position
[NASA-CASE-MFS-20240] c14 N71-26788

Method and apparatus for remote measurement of displacement of marks on specimen undergoing tensile test
[NASA-CASE-NPO-10778] c14 N72-11364

Spacecraft solar cell system with switching circuit to provide compensation for environmental changes
[NASA-CASE-GSC-10669-1] c03 N72-20031

Electric storage battery with high impact resistance
[NASA-CASE-NPO-11021] c03 N72-20C32

Method and apparatus for providing active attitude control for spacecraft by converting any attitude motion of vehicle into simple rotational motion
[NASA-CASE-BQN-10439] c21 N72-21624

Development of light sensing system for controlled orientation of object relative to sun or other light source
[NASA-CASE-NPO-11311] c14 N72-25414

Development of thrust control system for application to control of aircraft and spacecraft
[NASA-CASE-MSC-13397-1] c21 N72-25595

Development of computer program for estimating reliability of self-repair and fault-tolerant systems with respect to selected system and mission parameters
[NASA-CASE-NPO-13086-1] c15 N73-12495

Measurement system for physical quantity represented by or converted to variable frequency signal
[NASA-CASE-MFS-20658-1] c14 N73-30386

Design of precision vertical alignment system using laser with gravitationally sensitive cavity
[NASA-CASE-ARC-10444-1] c16 N73-33397

System for calibrating pressure transducer
[NASA-CASE-LAR-10910-1] c35 N74-13132

Three mirror glancing incidence system for X-ray telescope

[NASA-CASE-MFS-21372-1] c74 N74-27866

Holographic system for nondestructive testing
[NASA-CASE-MFS-21704-1] c35 N75-25124

Compact pulsed laser having improved heat conductance
[NASA-CASE-NFO-13147-1] c36 N77-25502

Tetherline system for orbiting satellites
[NASA-CASE-MFS-23564-1] c15 N78-25119

Non-tracking solar energy collector system
[NASA-CASE-NPO-13813-1] c44 N78-31526

Horizontally mounted solar collector
[NASA-CASE-MFS-23349-1] c44 N79-23481

Contour measurement system
[NASA-CASE-MFS-23726-1] c43 N79-26439

Solar energy control system
[NASA-CASE-MFS-25287-1] c44 N80-17544

Redundant motor drive system
[NASA-CASE-MFS-23777-1] c37 N80-32716

System for sterilizing objects --- cleaning space vehicle systems
[NASA-CASE-KSC-11085-1] c54 N81-24724

T

TACHOMETERS

Digital cardi tachometer incorporating circuit for measuring heartbeat rate of subject over predetermined portion of one minute also converting rate to beats per minute
[NASA-CASE-XMS-02399] c05 N71-22896

Brushless dc tachometer design with Hall effect crystals and output voltage magnitude proportional to rotor speed
[NASA-CASE-MFS-20385] c09 N71-24904

Development of instantaneous reading tachometer for measuring electrocardiogram signal rate
[NASA-CASE-MFS-20418] c14 N73-24473

Tachometer
[NASA-CASE-MFS-23175-1] c35 N77-30436

TAKOFF

Aircraft instrument for indicating malfunctions during takeoff
[NASA-CASE-XLA-00100] c14 N70-36807

Aircraft indicator for pilot control of takeoff roll, climbout path and verticle flight path in poor visibility conditions
[NASA-CASE-XLA-00487] c14 N70-40157

TANGENTS

Integrated circuit tangent function generator
[NASA-CASE-MSC-13907-1] c10 N73-26230

TANK GEOMETRY

Liquid propellant tank design with semitoroidal bulkhead
[NASA-CASE-XMP-01899] c31 N70-41948

TANKS (CONTAINERS)

Radiation source and detection system for measuring amount of liquid inside tanks independently of liquid configuration
[NASA-CASE-MSC-12280] c27 N71-16348

Development of apparatus and method for testing leakage of large tanks
[NASA-CASE-XMF-02392] c32 N71-24285

Floating baffle for tank drain
[NASA-CASE-KSC-10639] c15 N73-26472

Method of producing a storage bulb for an atomic hydrogen maser
[NASA-CASE-NFO-13050-1] c36 N75-15029

TANTALUM

Oxygen-doped tantalum emitter for thermionic devices such as cesium vapor diodes
[NASA-CASE-NFO-11138] c03 N70-34646

Arc electrode of graphite with tantalum ball tip
[NASA-CASE-XLE-04788] c09 N71-22987

Organometallic compounds of niobium and tantalum useful for film deposition
[NASA-CASE-XNP-04023] c06 N71-28808

Thermocouples of tantalum and rhenium alloys for more stable vacuum-high temperature performance
[NASA-CASE-LEW-12050-1] c35 N77-32454

TANTALUM ALLOYS

Evaporating crucible of tantalum-tungsten foil, nickel alumina bonding agent, and ceramic coating
[NASA-CASE-XLA-03105] c15 N69-27483

Tantalum modified ferritic iron base alloys
[NASA-CASE-LEW-12095-1] c26 N78-18182

TANTALUM CARBIDES

Thermal shock and erosion resistant tantalum carbide ceramic material

[NASA-CASE-LAR-11902-1] c27 N78-17206

TANTALUM OXIDES

Development of thin film temperature sensor from TaO [NASA-CASE-NPO-11775] c26 N72-28761

TAPE RECORDERS

Plural recorder system which limits signal recording to signals of sufficient interest [NASA-CASE-XMS-06949] c09 N69-21467

Endless loop tape transport mechanism for driving and tensioning recording medium in magnetic tape recorder [NASA-CASE-IGS-01223] c07 N71-10609

Development of low friction magnetic recording tape [NASA-CASE-XGS-00373] c23 N71-15978

Tape guidance system for multichannel digital recording system [NASA-CASE-XNP-09453] c08 N71-19420

Design and development of synchronous servo loop control system [NASA-CASE-XNP-03744] c10 N71-20448

Development of data storage system for storing digital data in high density format on magnetic tape [NASA-CASE-XNF-02778] c08 N71-22710

Digital telemetry system apparatus to reduce tape recorder wow and flutter noise during playback [NASA-CASE-XGS-01812] c07 N71-23001

Tape recorder designed for low power consumption and resistance to operational failure under high stress conditions [NASA-CASE-XGS-08259] c14 N71-23698

Transient video signal tape recorder with expanded playback [NASA-CASE-ARC-10003-1] c09 N71-25866

Closed loop servosystem for variable speed tape recorders onboard spacecraft [NASA-CASE-NPO-10700] c07 N71-33613

Design and characteristics of recording system for selective reprocessing and filtering of data to obtain optimum signal to noise ratios [NASA-CASE-ERC-10112] c07 N72-21119

Video tape recorder with scan conversion playback for color television signals [NASA-CASE-NPO-10166-1] c07 N73-22076

Scan converting video tape recorder [NASA-CASE-NPO-10166-2] c35 N76-16391

Method of and means for testing a tape record/playback system [NASA-CASE-MFS-22671-2] c35 N77-17426

TAPEBED COLUMNS

Method for shaping regeneratively cooled rocket motor casing having minimum thickness at each channel cross section [NASA-CASE-XLE-00409] c28 N71-15658

Regeneratively cooled rocket motor casing with tapered channels to insure minimum thicknesses at each channel cross section for necessary strength requirements [NASA-CASE-XLE-05689] c28 N71-15659

TARGET ACQUISITION

Acquisition and tracking system for optical radar [NASA-CASE-MFS-20125] c16 N72-13437

Target acquisition antenna feed with reflector system [NASA-CASE-GSC-10064-1] c10 N72-22235

Development of electronic detection system for remotely determining number and movement of enemy personnel [NASA-CASE-ARC-10097-2] c07 N73-25160

Optical signature generating and correlating apparatus [NASA-CASE-NPO-15226-1] c74 N81-19899

TARGET RECOGNITION

Electronic background suppression field scanning sensor for detecting point source targets [NASA-CASE-XGS-05211] c07 N69-39580

TARGET SIMULATORS

Simulator method and apparatus for practicing the mating of an observer-controlled object with a target [NASA-CASE-MFS-23052-2] c74 N79-13855

TARGETS

Method and apparatus for producing concentric hollow spheres --- inertial confinement fusion targets [NASA-CASE-NPO-14596-1] c31 N81-33319

TECHNOLOGY UTILIZATION

Fuselage structure using advanced technology metal matrix fiber reinforced composites [NASA-CASE-LAR-11688-1] c05 N78-18045

TEETH

Acoustic tooth cleaner [NASA-CASE-LAR-12471-1] c52 N81-12724

TEFLON (TRADEMARK)

Reinforced PTFE Teflon composite material diffusion bonded to metal substrate [NASA-CASE-MFS-20482] c15 N72-22492

Method of producing a storage bulb for an atomic hydrogen maser [NASA-CASE-NFO-13050-1] c36 N75-15029

Lead-oxygen dc power supply system having a closed loop oxygen and water system [NASA-CASE-MFS-23059-1] c44 N76-27664

TELECOMMUNICATION

Adaptive compression signal processor for PCM communication systems [NASA-CASE-XLA-03076] c07 N71-11266

Circuitry for generating sync signals in FM communication systems including video information [NASA-CASE-XNP-10830] c07 N71-11281

Automatic estimation of signal to noise ratio and other parameters in signal communication systems [NASA-CASE-XNF-05254] c07 N71-20791

Digital synchronizer for extracting binary data in receiver of PSK/PCM communication system [NASA-CASE-NFO-10851] c07 N71-24613

Encoders designed to generate comma free biorthogonal Reed-Muller type code comprising conversion of 64 6-bit words into 64 32-bit data for communication purposes [NASA-CASE-NPO-10595] c10 N71-25917

Multicarrier communications system for transmitting modulated signals from single transmitter [NASA-CASE-NPO-11548] c07 N73-26118

Synchronized digital communication system [NASA-CASE-XNP-03623] c09 N73-28084

Coherent receiver employing nonlinear coherence detection for carrier tracking [NASA-CASE-NFO-11921-1] c32 N74-30523

Pseudo-noise test set for communication system evaluation --- test signals [NASA-CASE-MFS-22671-1] c35 N75-21582

Modulator for tone and binary signals --- phase of modulation of tone and binary signals on carrier waves in communication systems [NASA-CASE-GSC-11743-1] c32 N75-24981

Secure communication system [NASA-CASE-MSC-16462-1] c32 N78-25274

Method and apparatus for quadriphase-shift-key and linear phase modulation [NASA-CASE-NPO-14444-1] c33 N81-15192

TELEMETRY

Fabrication of pressure-telemetry transducers [NASA-CASE-XNP-09752] c14 N69-21541

Telemetry data unit to form multibit words for use between demodulator and computer [NASA-CASE-XNP-09225] c09 N69-24333

Development of telemetry system for position location and data acquisition [NASA-CASE-GSC-10083-1] c30 N71-16090

Telespectrograph for analyzing upper atmosphere by tracking bodies reentering atmosphere at high velocities [NASA-CASE-XLA-03273] c14 N71-18699

Digitally controlled frequency synthesizer for pulse frequency modulation telemetry systems [NASA-CASE-XGS-02317] c09 N71-23525

Time division multiplexed telemetry transmitting system controlled by programmed memory [NASA-CASE-GSC-10131-1] c07 N71-24624

Temperature telemetric transmitter with frequency determining tank circuit for short range transmission [NASA-CASE-NFO-10649] c07 N71-24840

System designed to reduce time required for obtaining synchronization in data communication with spacecraft utilizing pseudonoise codes [NASA-CASE-NFO-10214] c10 N71-26577

Zero power telemetry actuated switch for biomedical equipment [NASA-CASE-ARC-10105] c09 N72-17153

- Development and characteristics of telemetry system using computer-accessed circuits and remotely controlled from ground station
[NASA-CASE-NPO-11358] c07 N72-25172
- Control and information system for digital telemetry data using analog converter to digitize sensed parameter values
[NASA-CASE-NPO-11016] c08 N72-31226
- Characteristics of two channel telemetry system with two data rate channels for high and low data rate communication
[NASA-CASE-NPO-11572] c07 N73-16121
- Improved phase lock loop for receiver in multichannel telemetry system with suppressed carrier
[NASA-CASE-NPO-11593-1] c07 N73-28012
- Telemetry synchronizer
[NASA-CASE-GSC-11868-1] c17 N76-22245
- Memory-based parallel data output controller
[NASA-CASE-GSC-12447-1] c60 N80-21567
- TELEOPERATORS**
- Cooperative multiaxis sensor for teleoperation of article manipulating apparatus
[NASA-CASE-NPO-13386-1] c54 N75-27758
- TELEPHONES**
- Telephone multiline signaling using common signal pair
[NASA-CASE-KSC-11023-1] c32 N79-23310
- TELEPHONY**
- Digital communication system
[NASA-CASE-MSC-13912-1] c32 N74-30524
- TELESCOPES**
- Pneumatic control of telescopic mirror support system
[NASA-CASE-XLA-03271] c11 N69-24321
- Tracking mount for laser telescope employed in tracking large rockets and space vehicles to give information regarding azimuth and elevation
[NASA-CASE-MFS-14017] c14 N71-26627
- Development of reflector system for application to line-of-sight pointing and tracking telescopes
[NASA-CASE-NPO-10468] c23 N71-33229
- Design and development of light sensing device for controlling orientation of object relative to sun or other light source
[NASA-CASE-NPO-11201] c14 N72-27469
- Bore scope with adjustable hinged telescoping optical system
[NASA-CASE-MFS-15162] c14 N72-32452
- Ritchey-Chretien telescope responsive to images located off telescope optical axis
[NASA-CASE-GSC-11487-1] c14 N73-30393
- Servo-controlled intravitral microscope system
[NASA-CASE-NPO-13214-1] c35 N75-25123
- TELETYPEWRITER SYSTEMS**
- Teletypewriter video communication system and apparatus
[NASA-CASE-XNP-06611] c07 N71-26102
- TELEVISION CAMERAS**
- Electrically operated rotary shutter for television camera aboard spacecraft
[NASA-CASE-XNP-00637] c14 N70-40273
- TV camera output signal control system for digital spacecraft communication
[NASA-CASE-XNP-01472] c14 N70-41807
- Solid state television camera system consisting of monolithic semiconductor mosaic sensor and molecular digital readout systems
[NASA-CASE-XMF-06092] c07 N71-24612
- Color television system for allowing monochrome television camera to produce color pictures
[NASA-CASE-MSC-12146-1] c07 N72-17109
- TV fatigue crack monitoring system
[NASA-CASE-LAR-11490-1] c39 N78-16387
- Optical conversion method --- for spacecraft television
[NASA-CASE-MSC-12618-1] c74 N78-17665
- TELEVISION EQUIPMENT**
- Conversion system for transforming slow scan rate of Apollo TV camera on moon to fast scan of commercial TV
[NASA-CASE-XMS-07168] c07 N71-11300
- Automatic closed circuit television arc guidance control for welding joints
[NASA-CASE-MFS-13046] c07 N71-19433
- Color television system utilizing single gun current sensitive color cathode ray tube
[NASA-CASE-ERC-10098] c09 N71-28618
- Television multiplexing system, using single crystal controlled clock for signal synchronization
[NASA-CASE-KSC-10654-1] c07 N73-30115
- Rotating raster generator
[NASA-CASE-FRC-10071-1] c32 N74-20813
- Auditory display for the blind
[NASA-CASE-HQN-10832-1] c71 N74-21014
- Spacecraft docking and alignment system --- using television camera system
[NASA-CASE-MSC-12559-1] c18 N76-14186
- System for producing chroma signals
[NASA-CASE-MSC-14683-1] c74 N77-18893
- TELEVISION RECEIVERS**
- Improvements in receiver of narrow bandwidth television system
[NASA-CASE-XMS-06740-1] c07 N71-26579
- TELEVISION SYSTEMS**
- Electron beam scanning system for improved image definition and reduced power requirements for video signal transmission
[NASA-CASE-ERC-10552] c09 N71-12539
- Development and characteristics of burst synchronization detection system
[NASA-CASE-XMS-05605-1] c10 N71-19468
- Improvements in receiver of narrow bandwidth television system
[NASA-CASE-XMS-06740-1] c07 N71-26579
- Stereoscopic television system, including projecting pair of binocular images
[NASA-CASE-ARC-10160-1] c23 N72-27728
- TELEVISION TRANSMISSION**
- Television simulation for aircraft and space flight
[NASA-CASE-XFR-03107] c09 N71-19449
- Automatic frequency control for FM transmitter
[NASA-CASE-MFS-21540-1] c32 N74-19790
- Television noise reduction device
[NASA-CASE-MSC-12607-1] c32 N75-21485
- TELLURIUM**
- Targets for producing high purity I-123
[NASA-CASE-LFW-10518-3] c25 N78-27226
- TEMPERATURE**
- Fluorinated esters of polycarboxylic acid and lubricating compositions for use at extreme temperature
[NASA-CASE-MFS-21040-1] c06 N73-30098
- TEMPERATURE COMPENSATION**
- Temperature compensated solid state differential amplifier with application in bioinstrumentation circuits
[NASA-CASE-XAC-00435] c09 N70-35440
- Variable frequency magnetic coupled multivibrator with temperature compensated frequency control circuit
[NASA-CASE-XGS-00458] c09 N70-38604
- Matched thermistors for microwave power meters with compensation for temperature changes
[NASA-CASE-NPO-10348] c10 N71-12554
- Development of temperature compensated thrust measuring gage for measuring forces as function of time in environment with varying temperature
[NASA-CASE-XGS-02319] c14 N71-22965
- Variable frequency subcarrier oscillator with temperature compensation
[NASA-CASE-XNP-03916] c09 N71-28810
- Omnidirectional liquid filled accelerometer design with liquid and housing temperature compensation
[NASA-CASE-HQN-10780] c14 N71-30265
- Development of thermal compensating structure which maintains uniform length with changes in temperature
[NASA-CASE-MFS-20433] c15 N72-28496
- Development of temperature compensated light source with components and circuitry for maintaining luminous intensity independent of temperature variations
[NASA-CASE-ARC-10467-1] c09 N73-14214
- Opto-mechanical subsystem with temperature compensation through isothermal design
[NASA-CASE-GSC-12059-1] c35 N77-27366
- Temperature compensated current source
[NASA-CASE-MSC-11235] c33 N78-17294
- TEMPERATURE CONTROL**
- Method and apparatus using temperature control for wavelength tuning of liquid lasers
[NASA-CASE-ERC-10187] c16 N69-31343

Ultraviolet radiation resistant alkali-metal
silicate coatings for temperature control of
spacecraft
[NASA-CASE-XGS-04119] c18 N69-39979

Passive thermal control coating on aluminum foil
laminate for inflatable spacecraft surfaces
[NASA-CASE-XLA-01291] c33 N70-36617

Thermal switch for transferring excess heat from
one region to another heat dissipating one
[NASA-CASE-XNP-00463] c33 N70-36847

Sandwich panel structure for removing heat from
shield between hot and cold areas
[NASA-CASE-XLA-00349] c33 N70-37979

Device for adding water to high velocity exhaust
jets to reduce velocity, noise, and temperature
[NASA-CASE-XMF-01813] c28 N70-41582

Modifying existing solar cells for temperature
control
[NASA-CASE-NPO-10109] c03 N71-11049

Temperature sensor warning system for pneumatic
tires of aircraft and ground vehicles
[NASA-CASE-XLA-01926] c14 N71-15620

Intermittent type silica gel adsorption
refrigerator for providing temperature control
for spacecraft components
[NASA-CASE-XNP-00920] c15 N71-15906

Using heat control unit to preheat circulating
fluid
[NASA-CASE-XMF-04237] c33 N71-16278

Mounting apparatus for temperature control system
[NASA-CASE-NPO-10138] c33 N71-16357

Design and development of device for cooling
inner conductor of coaxial cable
[NASA-CASE-XNP-09775] c09 N71-20445

Thermal control wall panel with application to
spacecraft cabins
[NASA-CASE-XLA-01243] c33 N71-22792

Development and characteristics of thermal
sensitive panel for controlling ratio of solar
absorptivity to surface emissivity for space
vehicle temperature control
[NASA-CASE-XLA-07728] c33 N71-22690

Method and apparatus for adjusting thermal
conductance in electronic components for space
use
[NASA-CASE-XNP-05524] c33 N71-24876

Device for rapid adjustment and maintenance of
temperature in electronic components
[NASA-CASE-XNP-02792] c14 N71-28958

Automatic control device for regulating inlet
water temperature of liquid cooled spacesuit
[NASA-CASE-MSC-13917-1] c05 N72-15098

Development of method for controlling vapor
content of gas
[NASA-CASE-NPO-10633] c03 N72-28025

Atomic hydrogen maser with bulb temperature
control by output frequency difference signal
for wall shift elimination
[NASA-CASE-HQN-10654-1] c16 N73-13489

Design and development of thermomechanical pump
for transmitting warming fluid through fluid
circuit to control temperature of spacecraft
instrumentation
[NASA-CASE-NPO-11417] c15 N73-24513

Automatic temperature control for liquid cooled
space suit
[NASA-CASE-ARC-10559-1] c05 N73-26071

Temperature control system comprised of
wheatstone bridge with RC circuit
[NASA-CASE-NPO-11304] c14 N73-26430

Development and characteristics of thermal
control system for maintaining constant
temperature within spacecraft module with wide
variations of component heat transfer
[NASA-CASE-GSC-11018-1] c31 N73-30829

Apparatus for controlling the temperature of
balloon-borne equipment
[NASA-CASE-GSC-11620-1] c34 N74-23039

Self-regulating proportionally controlled
heating apparatus and technique
[NASA-CASE-GSC-11752-1] c77 N75-20140

Rocket chamber and method of making
[NASA-CASE-LEW-11118-2] c20 N76-14191

Thermostatically controlled non-tracking type
solar energy concentrator
[NASA-CASE-NPO-13497-1] c44 N76-14602

Multi-chamber controllable heat pipe
[NASA-CASE-ARC-10199] c34 N78-17337

Thermal compensator for closed-cycle helium
refrigerator --- assuring constant temperature
for an infrared laser diode
[NASA-CASE-GSC-12168-1] c31 N79-17029

Low heat leak connector for cryogenic system
[NASA-CASE-XLE-02367-1] c31 N79-21225

Thermal control canister
[NASA-CASE-GSC-12253-1] c34 N79-31523

Automatic thermal switch --- Space Shuttle
equipment bay temperature control
[NASA-CASE-GSC-12415-1] c34 N80-18338

Heating and cooling system --- for fatigue test
specimens
[NASA-CASE-LAR-12393-1] c39 N80-25693

Pressure letdown method and device for coal
conversion systems
[NASA-CASE-NPO-15100-1] c28 N81-33306

TEMPERATURE DISTRIBUTION

Oven for heat treating heat shields
[NASA-CASE-XMS-04318] c15 N69-27871

Apparatus for supplying conditioned air at a
substantially constant temperature and humidity
[NASA-CASE-GSC-12191-1] c31 N80-32583

TEMPERATURE EFFECTS

Shock and vibration damping device using
temperature sensitive solid amorphous polymers
[NASA-CASE-XAC-11225] c14 N69-27486

Differential pressure cell insensitive to
changes in ambient temperature and extreme
overload
[NASA-CASE-XAC-00042] c14 N70-34816

Fluid flow control valve for regulating fluids
in molecular quantities
[NASA-CASE-XLE-00703] c15 N71-15967

Describing device for changing flow rate of
fluid in duct in response to change in
temperature
[NASA-CASE-MFS-14259] c15 N71-19213

Temperature sensitive magnetometer with
pulsating thermally cycled magnetic core
[NASA-CASE-XAC-03740] c14 N71-26135

Development of system with electrical properties
which vary with changes in temperature for use
with feedback loop in operational amplifier
circuit
[NASA-CASE-MSC-13276-1] c14 N71-27058

TEMPERATURE GRADIENTS

Differential thermopile for measuring cooling
water temperature rise
[NASA-CASE-XAC-00812] c14 N71-15598

Development of temperature compensated light
source with components and circuitry for
maintaining luminous intensity independent of
temperature variations
[NASA-CASE-ARC-10467-1] c09 N73-14214

Method for compression molding of thermosetting
plastics utilizing a temperature gradient
across the plastic to cure the article
[NASA-CASE-LAR-10489-1] c31 N74-18124

Method and apparatus for checking fire detectors
[NASA-CASE-GSC-11600-1] c35 N74-21019

Heat pipe honeycomb panel
[NASA-CASE-LAR-12637-1] c34 N81-12362

Dual laser optical system and method for
studying fluid flow
[NASA-CASE-MFS-25315-1] c36 N81-19440

TEMPERATURE MEASUREMENT

Filter arrangement for controlling light
intensity in motion picture camera used in
optical pyrometry
[NASA-CASE-XLA-J0062] c14 N70-33254

Development of apparatus for measuring thermal
conductivity
[NASA-CASE-XGS-01052] c14 N71-15992

Design and characteristics of thermocouples
consisting of flexible tape for improved
attachment to temperature source
[NASA-CASE-XNP-01659] c14 N71-23039

Black body cavity radiometer with thermal
resistance wire bridge circuit
[NASA-CASE-XNP-08961] c14 N71-24809

Design, development, and characteristics of
pressure and temperature sensor operating
immersed in fluid flow
[NASA-CASE-LEW-10281-1] c14 N72-17327

Development of thermocouple instrument for
measuring temperature of wall heated by
flowing fluid without disturbing boundary layer
[NASA-CASE-XLE-05230] c14 N72-27410

- Thermocouple apparatus for measuring wall temperatures in regeneratively cooled rocket engines having thin walled cooling passages
[NASA-CASE-XLE-05236-2] c14 N73-13417
- Thermochromic compositions for detecting heat levels in electronic circuits and devices
[NASA-CASE-NPO-10764-1] c14 N73-14428
- Method of fabricating an article with cavities --- with thin bottom walls
[NASA-CASE-LAR-10318-1] c31 N74-18089
- Method for determining thermo-physical properties of specimens --- photographic recording of changes in thin film phase-change temperature indicating material in wind tunnel
[NASA-CASE-LAR-11053-1] c25 N74-18551
- Wind sensor
[NASA-CASE-NPO-13462-1] c35 N76-24524
- Miniature ingestible telemeter devices to measure deep-body temperature
[NASA-CASE-ARC-10583-1] c52 N76-29894
- Multi-channel temperature measurement amplification system
[NASA-CASE-MFS-23775-1] c35 N80-17421
- Solar energy control system
[NASA-CASE-MFS-25287-1] c44 N80-17544
- Thermocouple, multiple junction reference oven
[NASA-CASE-FRC-10112-1] c35 N81-26431
- TEMPERATURE MEASURING INSTRUMENTS**
- Temperature sensor warning system for pneumatic tires of aircraft and ground vehicles
[NASA-CASE-XLA-01926] c14 N71-15620
- Electric network for monitoring temperatures, detecting critical temperatures, and indicating critical time duration
[NASA-CASE-XMF-01097] c10 N71-16658
- Electromagnetic energy detection by thermal sensor with vibrating electrode
[NASA-CASE-XAC-10768] c09 N71-18830
- Input radio frequency circuit for switching type absolute temperature measuring radiometer for noise sources
[NASA-CASE-ERC-11020] c14 N71-26774
- High intensity radiant energy pulse source for calibrating heat transfer gages with thermoluminescent shutter activation
[NASA-CASE-ARC-10178-1] c09 N72-17152
- Development of flexible thermocouple in form of tape for adaptation to special temperature measuring conditions
[NASA-CASE-LEW-11072-1] c14 N73-24472
- Thermocouples of tantalum and rhenium alloys for more stable vacuum-high temperature performance
[NASA-CASE-LEW-12050-1] c35 N77-32454
- TEMPERATURE PROBES**
- Thermally sensitive tuning probe for nullifying detuning effects in microwave cavity resonator of amplifier
[NASA-CASE-XNP-00449] c14 N70-35220
- Design, development, and characteristics of pressure and temperature sensor operating immersed in fluid flow
[NASA-CASE-LEW-10281-1] c14 N72-17327
- TEMPERATURE SENSORS**
- Miniaturized radiometer for detecting low level thermal radiation
[NASA-CASE-XLA-04556] c14 N69-27484
- Mounting fixture for supporting thermobulb in pipeline
[NASA-CASE-NPO-10158] c33 N71-16356
- Mounting apparatus for temperature control system
[NASA-CASE-NPO-10138] c33 N71-16357
- Heat flux sensor adapted for mounting on aircraft or spacecraft to measure aerodynamic heat flux inflow to aircraft skin
[NASA-CASE-XPR-03802] c33 N71-23085
- Temperature telemetric transmitter with frequency determining tank circuit for short range transmission
[NASA-CASE-NPO-10649] c07 N71-24840
- Black body radiometer design with temperature sensing and cavity heat source cone winding
[NASA-CASE-XNP-05701] c14 N71-26475
- Thin film capacitive bolometer and capacitance temperature interchange sensor
[NASA-CASE-NPO-10607] c09 N71-27232
- Development of thin film temperature sensor from TaO
[NASA-CASE-NPO-11775] c26 N72-28761
- Heat detection and compositions and devices therefor
[NASA-CASE-NFO-10764-2] c35 N75-25122
- Optical crystal temperature gauge with fiber optic connections --- cryogenic systems
[NASA-CASE-MSC-18627-1] c74 N81-15818
- TEMPLATES**
- Precision surface cutter for screen circuit negatives and other microcircuits
[NASA-CASE-XLA-09843] c15 N72-27485
- TENSILE STRENGTH**
- Method for producing fiber reinforced metallic composites with high strength and elasticity over wide temperature range
[NASA-CASE-XLE-00231] c17 N70-38198
- Composites reinforced with short metal fibers or whiskers and having high tensile strength
[NASA-CASE-XLE-00228] c17 N70-38490
- Apparatus for tensile strength testing of specimen by pressurized fluid
[NASA-CASE-XKS-06250] c14 N71-15600
- Process for fiberizing ceramic materials with high fusion temperatures and tensile strength
[NASA-CASE-XNP-00597] c18 N71-23088
- Tensile strength testing device having pulley guides for exerting multiple forces on test specimen
[NASA-CASE-XNP-05634] c15 N71-24834
- Device for use in loading tension members --- characterized by elongated elastic body
[NASA-CASE-MFS-21488-1] c14 N75-24794
- Method of carbonizing polyacrylonitrile fibers and resulting product
[NASA-CASE-ARC-11261-1] c24 N81-29164
- TENSILE STRESS**
- Method for testing rocket nozzles at high tensile stress levels
[NASA-CASE-NFO-10311] c31 N71-15643
- Device for measuring tensile forces
[NASA-CASE-MFS-21728-1] c35 N74-27865
- Solid medium thermal engine
[NASA-CASE-ARC-10461-1] c44 N74-33379
- TENSILE TEST**
- Tensile strength testing device having pulley guides for exerting multiple forces on test specimen
[NASA-CASE-XNP-05634] c15 N71-24834
- TENSILE TESTS**
- Apparatus for tensile strength testing of specimen by pressurized fluid
[NASA-CASE-XKS-06250] c14 N71-15600
- Apparatus for measuring load on cable under static or dynamic conditions comprising pulleys pivoting structure against restraint of tension strap
[NASA-CASE-XMS-04545] c15 N71-22878
- Method and apparatus for remote measurement of displacement of marks on specimen undergoing tensile test
[NASA-CASE-NFO-10778] c14 N72-11364
- Anti-buckling fatigue test assembly --- for subjecting metal specimen to tensile and compressive loads at constant temperature
[NASA-CASE-LAR-10426-1] c09 N74-19528
- Method and apparatus for tensile testing of metal foil
[NASA-CASE-LAR-10208-1] c35 N76-18400
- Device for tensioning test specimens within an hermetically sealed chamber
[NASA-CASE-MFS-23281-1] c35 N77-22450
- TENSION**
- Meter for use in detecting tension in straps having predetermined elastic characteristics
[NASA-CASE-MFS-22189-1] c35 N75-19615
- TERMINAL GUIDANCE**
- Data processing and display system for terminal guidance of X-15 aircraft
[NASA-CASE-XPR-00756] c02 N71-13421
- Terminal guidance system --- for guiding aircraft into preselected altitude and/or heading at terminal point
[NASA-CASE-FRC-10049-1] c04 N74-13420
- Terminal guidance sensor system
[NASA-CASE-NFO-14521-1] c54 N79-20746
- Terminal guidance sensor system --- space shuttle coupling to orbiting satellites
[NASA-CASE-NFO-14521-1] c37 N81-27519
- TERNARY SYSTEMS**
- NiCrAl ternary alloy having improved cyclic

- oxidation resistance
[NASA-CASE-LEW-13339-1] c26 N81-12211
- TERRAIN**
Vertically descending flight vehicle landing
gear for rough terrain
[NASA-CASE-XMF-01174] c02 N7C-41589
- TERRAIN ANALYSIS**
Surface roughness measuring system --- synthetic
aperture radar measurements of ocean wave
height and terrain peaks
[NASA-CASE-NPO-13862-1] c35 N79-10391
Method for observing the features characterizing
the surface of a land mass
[NASA-CASE-FRC-11013-1] c43 N81-17499
- TEST CHAMBERS**
System for continuous monitoring of exhalations,
weighing, and cage cleaning for animal exposed
to controlled atmosphere for toxic study
[NASA-CASE-XAC-05333] c11 N71-22875
Multisample test chamber for exposing materials
to X rays, temperature change, and gaseous
conditions and determination of material effects
[NASA-CASE-XMS-02930] c11 N71-23042
Flammability test chamber for testing materials
in certain predetermined environments
[NASA-CASE-KSC-10126] c11 N71-24585
Pressure seals suitable for use in environmental
test chambers
[NASA-CASE-NPO-10796] c15 N71-27668
Test chamber for determining decomposition and
autoignition of materials used in spacecraft
under controlled environmental conditions
[NASA-CASE-KSC-10198] c11 N71-28629
Test chambers with orifice and helium mass
spectrometer for detecting leak rate of
encapsulated semiconductor devices
[NASA-CASE-ERC-10150] c14 N71-28992
Method for measuring biaxial stress in a body
subjected to stress inducing loads
[NASA-CASE-MFS-23299-1] c39 N77-28511
- TEST EQUIPMENT**
Equipment for testing of ground station ranging
equipment and spacecraft transponders
[NASA-CASE-XMS-05454-1] c07 N71-12391
Apparatus for tensile strength testing of
specimen by pressurized fluid
[NASA-CASE-YKS-06250] c14 N71-15600
Development of black-body source calibration
furnace
[NASA-CASE-XLE-01399] c33 N71-15625
Design and characteristics of thermocouples
consisting of flexible tape for improved
attachment to temperature source
[NASA-CASE-XNP-01659] c14 N71-23339
Automatic controlled thermal fatigue testing
apparatus
[NASA-CASE-XLA-02059] c33 N71-24276
Development and characteristics of electric
circuitry for detecting electrical pulses rise
time and amplitude
[NASA-CASE-XMF-08804] c09 N71-24717
Automated ball rebound resilience test equipment
for determining viscoelastic properties of
polymers
[NASA-CASE-XLA-08254] c14 N71-26161
Portable equipment for validating C band launch
pad antennas and transmission lines used for
spacecraft checkout
[NASA-CASE-XKS-10543] c07 N71-26292
Acoustic vibration test apparatus for wiring
harnesses
[NASA-CASE-MSC-15158-1] c14 N72-17325
Design and development of two types, of
atmosphere sampling chambers
[NASA-CASE-NPO-11373] c13 N72-25323
Development of apparatus for testing burning
rate and flammability of materials
[NASA-CASE-XMS-05690] c33 N72-25513
Development of apparatus for detonating
explosive devices in order to determine forces
generated and detonation propagation rate
[NASA-CASE-LAR-16800-1] c33 N72-27959
Equipment for vibration testing of assemblies,
components, and other articles
[NASA-CASE-GSC-11302-1] c14 N73-13416
Design and development of test stand system for
supporting test items in vacuum chamber
[NASA-CASE-MFS-21362] c11 N73-20267
- Development and characteristics of apparatus for
measuring intensity of electric field in
atmosphere
[NASA-CASE-KSC-10730-1] c14 N73-32318
Test equipment to prevent buckling of small
diameter specimens during compression tests
[NASA-CASE-LAR-10440-1] c14 N73-32323
Wind tunnel model and method
[NASA-CASE-LAR-10812-1] c09 N74-17955
Anti-buckling fatigue test assembly --- for
subjecting metal specimen to tensile and
compressive loads at constant temperature
[NASA-CASE-LAR-10426-1] c09 N74-19528
Method and apparatus for checking fire detectors
[NASA-CASE-GSC-11600-1] c35 N74-21019
Battery testing device --- for testing cells of
multiple-cell battery
[NASA-CASE-MFS-20761-1] c44 N74-27519
Signal conditioner test set
[NASA-CASE-KSC-10750-1] c35 N75-12270
Particulate and aerosol detector
[NASA-CASE-LAR-11434-1] c35 N76-22509
High temperature strain gage calibration fixture
[NASA-CASE-LAR-11500-1] c35 N76-24523
Method of and means for testing a tape
record/playback system
[NASA-CASE-MFS-22671-2] c35 N77-17426
Method of and means for testing a
glancing-incidence mirror system of an X-ray
telescope
[NASA-CASE-MFS-22409-2] c74 N78-15880
- TEST FACILITIES**
Electric propulsion engine test chamber
[NASA-CASE-XLE-00252] c11 N70-34844
Test apparatus for determining mechanical
properties of refractory materials at high
temperatures in vacuum or inert atmospheres
[NASA-CASE-XLE-00335] c14 N70-35368
Gas analyzer for bi-gaseous mixtures suitable
for use in test facilities
[NASA-CASE-XLA-01131] c14 N71-10774
Design and characteristics of device for
launching models in wind tunnels without
disturbance of air flow
[NASA-CASE-XNP-03578] c11 N71-23030
Design, development, and operation of shock tube
with bypass piston tunnel
[NASA-CASE-NPO-12109] c11 N72-22245
- TEST STANDS**
Automatic balancing device for use on
frictionless supported attitude-controlled
test platforms
[NASA-CASE-LAR-10774] c10 N71-13545
Micro-pound extended range thrust stand for
small rocket engines
[NASA-CASE-GSC-10710-1] c28 N71-27094
- TETHERED SATELLITES**
Tetherline system for orbiting satellites
[NASA-CASE-MFS-23564-1] c15 N78-25119
- TETHERING**
Force separation rigid tethering device using
cables
[NASA-CASE-XLA-02332] c32 N71-17609
Space expandable tether device for use as
passageway between two docked spacecraft
[NASA-CASE-XMS-10993] c15 N71-28936
- TETHERLINES**
Flexible cable that can be made rigid
[NASA-CASE-MSC-13512-1] c15 N72-22485
Tetherline system for orbiting satellites
[NASA-CASE-MFS-23564-1] c15 N78-25119
- TETRAPHENYLS**
Chemical synthesis of thermally stable
organometallic polymers with divalent metal
ion and tetraphenylphosphonitrilic units
[NASA-CASE-HQN-10364] c06 N71-27363
- TEXTILES**
Non-flammable elastomeric fiber from a
fluorinated elastomer and containing an
halogenated flame retardant
[NASA-CASE-MSC-14331-1] c27 N76-24405
- TEXTURES**
Modification of the electrical and optical
properties of polymers --- ion irradiation to
create texture
[NASA-CASE-LEW-13027-1] c27 N80-24437
Texturing polymer surfaces by transfer casting
--- cardiovascular prosthesis
[NASA-CASE-LEW-13120-1] c31 N81-16327

- Mechanical bonding of metal
[NASA-CASE-LEW-12941-1] c31 N81-16329
- Ion sputter textured graphite --- applications
to electron tube devices
[NASA-CASE-LEW-12919-1] c24 N81-27198
- THERMAL ABSORPTION**
- Development and characteristics of calorimeter
with integral heat sink for maintenance of
constant temperature
[NASA-CASE-XMF-04208] c33 N71-29051
- Solar pond
[NASA-CASE-NPO-13581-2] c44 N78-31525
- THERMAL CONDUCTIVITY**
- Measuring conductive heat flow and thermal
conductivity of laminar gas stream in
cylindrical plug to simulate atmospheric reentry
[NASA-CASE-XLE-00266] c14 N70-34156
- Development of apparatus for measuring thermal
conductivity
[NASA-CASE-XGS-01052] c14 N71-15992
- Heated element sensor for fluid flow detection
in thermal conductive conduit with adaptive
means to determine flow rate and direction
[NASA-CASE-MSC-12084-1] c12 N71-17569
- Method and apparatus for adjusting thermal
conductance in electronic components for space
use
[NASA-CASE-XNP-05524] c33 N71-24876
- Thermally conductive polymer for potting
electrical components
[NASA-CASE-GSC-11304-1] c06 N72-21105
- Electrostatically controlled heat transfer
system for conducting thermal energy
[NASA-CASE-NPO-11942-1] c33 N73-32818
- Thermal barrier coating system
[NASA-CASE-LEW-12554-1] c34 N78-18355
- Automatic thermal switch
[NASA-CASE-GSC-12553-1] c33 N80-21671
- Support assembly for cryogenically coolable
low-noise choke waveguide
[NASA-CASE-NPO-14253-1] c32 N80-32605
- Heat pipe honeycomb panel
[NASA-CASE-LAR-12637-1] c34 N81-12362
- THERMAL CONDUCTORS**
- Thermal conductive, electrically insulated
cleavable adhesive connection between
electronic module and heat sink
[NASA-CASE-XMS-02087] c09 N70-41717
- Solar energy absorber
[NASA-CASE-MFS-22743-1] c44 N76-22657
- THERMAL CONTROL COATINGS**
- Low concentration alkaline solution treatment of
aluminum with metal phosphate surface coatings
to improve chemical bonding and reduce coating
weight
[NASA-CASE-XLA-01995] c18 N71-23047
- Binder stabilized zinc oxide pigmented coating
for spacecraft thermal control
[NASA-CASE-XMF-07770-2] c18 N71-26772
- Inorganic thermal control and solar reflector
coatings
[NASA-CASE-MFS-20011] c18 N72-22566
- Mercaptan terminated polymer containing sulfonic
acid salts of nitrosubstituted aromatic amines
for heat and moisture resistant coatings
[NASA-CASE-ARC-10325] c06 N72-25147
- Refractory porcelain enamel passive control
coating for high temperature alloys
[NASA-CASE-MFS-22324-1] c27 N75-27160
- Particulate and solar radiation stable coating
for spacecraft
[NASA-CASE-LAR-10805-2] c34 N77-18382
- Method of preparing zinc orthotitanate pigment
[NASA-CASE-MFS-23345-1] c27 N77-30237
- Intumescent coatings containing
4,4'-dinitrosulfanilide
[NASA-CASE-ARC-11042-1] c24 N78-14096
- Thermal barrier coating system
[NASA-CASE-LEW-12554-1] c34 N78-18355
- High temperature resistant cermet and ceramic
compositions --- for thermal resistant
insulators and refractory coatings
[NASA-CASE-NPO-13690-1] c27 N78-19302
- Intumescent-ablator coatings using endothermic
fillers
[NASA-CASE-ARC-11043-1] c24 N78-27180
- Lightweight electrically-powered flexible
thermal laminate --- made of metal and
nonconductive yarns
[NASA-CASE-MSC-12662-1] c33 N79-12331
- Electrically conductive thermal control coatings
[NASA-CASE-GSC-12207-1] c24 N79-14156
- THERMAL DEGRADATION**
- Use of silicon controlled rectifier shorting
circuit to protect thermoelectric generator
source from thermal destruction
[NASA-CASE-XGS-04808] c03 N69-25146
- Electrical failure detector in solid rocket
propellant motor insulation against thermal
degradation by fuel grain
[NASA-CASE-XMF-03968] c14 N71-27186
- THERMAL DIFFUSIVITY**
- Double-beam optical method and apparatus for
measuring thermal diffusivity and other
molecular dynamic processes in utilizing the
transient thermal lens effect
[NASA-CASE-NPO-14657-1] c74 N81-17887
- THERMAL EMISSION**
- Electromagnetic radiation energy arrangement ---
coatings for solar energy absorption and
infrared reflection
[NASA-CASE-WOO-00428-1] c32 N79-19186
- THERMAL ENERGY**
- Direct conversion of thermal energy into
electrical energy using crossed electric and
magnetic fields
[NASA-CASE-XLE-00212] c03 N70-34134
- Concentrator device for controlling direction of
solar energy onto energy converters
[NASA-CASE-XLE-01716] c09 N70-40234
- Storage stable, thermally activated foaming
compositions for erecting and rigidizing
mechanisms of thin sheet solar collectors
[NASA-CASE-LAR-10373-1] c18 N71-26155
- Gaseous core diffusion nuclear reactor for
thermal energy generation
[NASA-CASE-LEW-10250-1] c22 N71-28759
- Electrostatically controlled heat transfer
system for conducting thermal energy
[NASA-CASE-NPO-11942-1] c33 N73-32818
- Solid medium thermal engine
[NASA-CASE-ARC-10461-1] c44 N74-33379
- Panel for selectively absorbing solar thermal
energy and the method of producing said panel
[NASA-CASE-MFS-22562-1] c44 N76-14595
- Thermal energy storage system --- operating on
superheating of liquids
[NASA-CASE-MFS-23167-1] c44 N76-31667
- Low to high temperature energy conversion system
[NASA-CASE-NPO-13510-1] c44 N77-32581
- Thermal energy transformer
[NASA-CASE-NPO-14058-1] c44 N79-18443
- THERMAL EXPANSION**
- Gas valve operated by thermally expanding and
contracting device
[NASA-CASE-XLE-00815] c15 N70-35407
- Adjustable rigid mount for trihedral mirror
formed of alloy with small coefficient of
thermal expansion supporting screws and
spring-biased plates
[NASA-CASE-XNP-08907] c23 N71-29123
- Application of spiral, bimetallic strip to
create circular motion on mechanical shaft by
changing strip temperature
[NASA-CASE-NPO-11283] c09 N72-25260
- Glass-to-metal seals comprising relatively high
expansion metals
[NASA-CASE-LEW-10698-1] c37 N74-21063
- THERMAL FATIGUE**
- Automatic controlled thermal fatigue testing
apparatus
[NASA-CASE-XLA-02059] c33 N71-24276
- THERMAL INSULATION**
- Low thermal loss piping arrangement for moving
cryogenic media through double chamber structure
[NASA-CASE-XNP-08882] c15 N69-39935
- Insulating system for receptacles of liquefied
gases using wire cloth for forming frost layer
[NASA-CASE-XMF-00341] c15 N70-33323
- Unfired-ceramic, highly reflective composite
insulation for large launch vehicles
[NASA-CASE-XMF-01030] c18 N70-41583
- Carbon dioxide purge systems to prevent
condensation in spaces between cryogenic fuel
tanks and hypersonic vehicle skin
[NASA-CASE-XLA-01967] c31 N70-42015
- Preparation and characteristics of lightweight
refractory insulation

- [NASA-CASE-XMF-05279] c18 N71-16124
Development of thermal insulation system for wing and control surfaces of hypersonic aircraft and reentry vehicles
[NASA-CASE-XLA-00692] c33 N71-17897
Prefabricated multilayered self-evacuating insulation panels using gas with low vapor pressure at cryogenic temperatures for application to storage of cryogenics
[NASA-CASE-XLE-04222] c23 N71-22681
Light weight plastic foam thermal insulation for cryogenic storage
[NASA-CASE-XLE-02647] c18 N71-23658
Development of foam insulation for filament wound cryogenic storage tank
[NASA-CASE-XLE-03803] c15 N71-23816
Multilayer insulation panels for cryogenic liquid containers
[NASA-CASE-MPS-14023] c33 N71-25351
Double-wall isothermal cylinder containing heat transfer fluid thermal reservoir as spacecraft insulation cover
[NASA-CASE-MPS-20355] c33 N71-25353
Structure of fabric layers for micrometeoroid protection garment with capability for eliminating heat shorts for use in manufacturing space suits
[NASA-CASE-MSC-12109] c18 N71-26285
Foam insulation thickness measuring and injection device for spacecraft applications
[NASA-CASE-MPS-20261] c14 N71-27005
Development of thermal insulation material for insulating liquid hydrogen tanks in spacecraft
[NASA-CASE-XMF-05046] c33 N71-28892
Para-benzoquinone dioxime and concentrated mineral acid processed to yield intumescent or fire resistant, heat insulating materials
[NASA-CASE-ARC-10304-1] c18 N73-26572
Development and characteristics of thermal control system for maintaining constant temperature within spacecraft module with wide variations of component heat transfer
[NASA-CASE-GSC-11018-1] c31 N73-30829
Heater-mixer for stored fluids
[NASA-CASE-ARC-10442-1] c35 N74-15693
Intumescent composition, foamed product prepared therewith and process for making same
[NASA-CASE-ARC-10304-2] c27 N74-27637
High current electrical lead --- for thermionic converters
[NASA-CASE-LEW-10950-1] c33 N74-27683
Structural heat pipe --- for spacecraft wall thermal insulation system
[NASA-CASE-GSC-11619-1] c34 N75-12222
Strain arrestor plate for fused silica tile --- bonding of thermal insulation to metallic plates or structural parts
[NASA-CASE-MSC-14182-1] c27 N76-14264
Auger attachment method for insulation --- of spacecraft
[NASA-CASE-MSC-12615-1] c37 N76-19437
Flexible pile thermal barrier insulator
[NASA-CASE-MSC-19568-1] c34 N78-25350
Thermal insulation attaching means --- adhesive bonding of felt vibration insulators under ceramic tiles
[NASA-CASE-MSC-12619-2] c27 N79-12221
Diced tile thermal protection for spacecraft
[NASA-CASE-MSC-16366-1] c24 N79-23142
Fibrous refractory composite insulation --- shielding reusable spacecraft
[NASA-CASE-ARC-11169-1] c24 N79-24062
Thermal insulation protection means
[NASA-CASE-MSC-12737-1] c24 N79-25142
Carboranylclotriphosphazenes and their polymers --- thermal insulation
[NASA-CASE-ARC-11176-1] c27 N80-21533
Installing fiber insulation
[NASA-CASE-MSC-16973-1] c37 N81-14317
A method and technique for installing light-weight fragile, high-temperature fiber insulation --- spacecraft heat sealing
[NASA-CASE-MSC-16934-2] c37 N81-16468
Process for the preparation of polycarboranylphosphazenes --- thermal insulation
[NASA-CASE-ARC-11176-2] c27 N81-27271
- THERMAL PLASMAS**
Apparatus for producing monochromatic light from continuous plasma source
[NASA-CASE-XNP-04167-2] c25 N72-24753
- THERMAL PROTECTION**
Thermoprotective device for balances
[NASA-CASE-XAC-00648] c14 N70-40400
Design, development, and characteristics of ablation structures
[NASA-CASE-XMS-01816] c33 N71-15623
Development of spacecraft radiator cover
[NASA-CASE-MSC-12049] c31 N71-16080
Characteristics of foamed-in-place ceramic refractory insulating material and method of fabrication
[NASA-CASE-XGS-02435] c18 N71-22998
Unfired ceramic insulation for protection from radiant heating environments
[NASA-CASE-MPS-14253] c33 N71-24858
Development of solid state polymer coating for obtaining thermal balance in spacecraft components
[NASA-CASE-XLA-01745] c33 N71-28903
Anodizing method for providing metal surfaces with temperature reducing coatings against flames
[NASA-CASE-XLE-00035] c33 N71-29151
Ablative heat shield for protection from aerodynamic heating of reentry spacecraft
[NASA-CASE-MSC-12143-1] c33 N72-17947
Lightweight fire resistant plastic foam for thermal protection of reentry vehicles and aircraft structures
[NASA-CASE-ARC-10180-1] c28 N72-20767
Flexible fire retardant polyisocyanate modified neoprene foam --- for thermal protective devices
[NASA-CASE-ABC-10180-1] c27 N74-12814
Adjustable securing base
[NASA-CASE-MSC-19666-1] c37 N78-17383
Reaction cured glass and glass coatings
[NASA-CASE-ARC-11051-1] c27 N78-32260
Diced tile thermal protection for spacecraft
[NASA-CASE-MSC-16366-1] c24 N79-23142
Multiwall thermal protection system
[NASA-CASE-LAR-12620-1] c24 N80-12117
Improved attachment system for silica tiles --- thermal protection for space shuttle orbiter
[NASA-CASE-MSC-18741-1] c16 N81-16110
Thermal barrier coating system having improved adhesion
[NASA-CASE-LEW-13359-1] c27 N81-24265
Corrosion resistant thermal barrier coating --- protecting gas turbines and other engine parts
[NASA-CASE-LEW-13088-1] c26 N81-25188
- THERMAL RADIATION**
Miniaturized radiometer for detecting low level thermal radiation
[NASA-CASE-XLA-04556] c14 N69-27484
Temperature sensitive capacitor device for detecting very low intensity infrared radiation
[NASA-CASE-XNP-09750] c14 N69-39937
High temperature source of thermal radiation
[NASA-CASE-XLE-00490] c33 N70-34545
Development and characteristics of thermal radiation shielding of refractory metal foil used for induction furnace
[NASA-CASE-XLE-03432] c33 N71-24145
Black body cavity radiometer with thermal resistance wire bridge circuit
[NASA-CASE-XNP-08961] c14 N71-24809
Development of method for protecting large and oddly shaped areas from radiant and convective heat
[NASA-CASE-XNP-01310] c33 N71-28852
- THERMAL REACTORS**
Non-equilibrium radiation nuclear reactor
[NASA-CASE-HQN-10841-1] c73 N78-19920
- THERMAL RESISTANCE**
Single electrical circuit component combining diode, fuse, and blown indicator with elongated tube of heat resistant transparent material
[NASA-CASE-XKS-03381] c09 N71-22796
Polyimide foam for the thermal insulation and fire protection
[NASA-CASE-ARC-10464-1] c27 N74-12812
Dual measurement ablation sensor
[NASA-CASE-LAR-10105-1] c34 N74-15652
Self-regulating proportionally controlled heating apparatus and technique
[NASA-CASE-GSC-11752-1] c77 N75-20140

Heat resistant polymers of oxidized styrylphosphine
[NASA-CASE-MSC-14903-1] c27 N78-32256

Ambient cure polyimide foams --- thermal resistant foams
[NASA-CASE-ARC-11170-1] c27 N79-11215

Surface conforming thermal/pressure seal --- for control devices in space vehicles
[NASA-CASE-MSC-18422-1] c37 N80-14400

The 1,2,4-oxadiazole elastomers --- heat resistant polymers
[NASA-CASE-ARC-11253-1] c27 N81-17262

High stability amplifier
[NASA-CASE-GSC-12646-1] c33 N81-32391

THERMAL SHOCK
Development of equipment for measuring thermal shock resistance of thin discs of material
[NASA-CASE-XLE-02024] c14 N71-22964

Thermal shock resistant hafnia ceramic materials
[NASA-CASE-LAR-10894-1] c18 N73-14584

Thermal shock and erosion resistant tantalum carbide ceramic material
[NASA-CASE-LAR-11902-1] c27 N78-17206

Laser surface fusion of plasma sprayed ceramic turbine seals
[NASA-CASE-LEW-13269-1] c27 N81-22190

THERMAL SIMULATION
Simulating operation of thermopile vacuum gage tube at high and low pressures
[NASA-CASE-XLA-02758] c14 N71-18481

THERMAL STABILITY
Bonded solid lubricant coatings of calcium fluoride and binder for high temperature stability
[NASA-CASE-XMS-00259] c18 N70-36400

Portable environmental control and life support system for astronaut in and out of spacecraft
[NASA-CASE-XMS-05632-1] c05 N71-11203

Chemical synthesis of thermally stable organometallic polymers with divalent metal ion and tetraphenylphosphonitrilic units
[NASA-CASE-HQN-10364] c06 N71-27363

Cermets for nuclear fuel constructed by pressing metal coated ceramic particles in die at temperature to cause bonding of metal coatings, and tested for thermal stability
[NASA-CASE-LEW-10219-1] c18 N71-28729

Ultraviolet and thermally stable polymer compositions
[NASA-CASE-ARC-10592-1] c27 N74-21156

Ultraviolet and thermally stable polymer compositions
[NASA-CASE-ARC-10592-2] c27 N76-32315

Sound-suppressing structure with thermal relief
[NASA-CASE-LEW-12658-1] c71 N79-14671

Infusible silazane polymer and process for producing same --- protective coatings
[NASA-CASE-XMP-02526-1] c27 N79-21190

Catalytic trimerization of aromatic nitriles and triaryl-s-triazine ring cross-linked high temperature resistant polymers and copolymers made thereby
[NASA-CASE-LEW-12053-2] c27 N79-28307

THERMAL STRESSES
Strain gage for detecting and measuring mechanical strain in thermally strained specimens
[NASA-CASE-FRC-10053] c14 N70-35587

Multilegged support system for wind tunnel test models subjected to thermal dynamic loading
[NASA-CASE-XLA-01326] c11 N71-21481

Development of device for simulating cyclic thermal loading of flexible materials by application of mechanical stresses and deformations
[NASA-CASE-LAR-10270-1] c32 N72-25677

Apparatus and method for reducing thermal stress in a turbine rotor
[NASA-CASE-LEW-12232-1] c07 N79-10057

Method for alleviating thermal stress damage in laminates --- metal matrix composites
[NASA-CASE-LEW-12493-1] c24 N81-17170

Method for alleviating thermal stress damage in laminates
[NASA-CASE-LEW-12493-2] c24 N81-26179

THERMIONIC CATHODES
Thermionic cesium diode converter with cavity emitters
[NASA-CASE-NPO-10412] c09 N71-28421

THERMIONIC CONVERTERS

Vacuum thermionic converter with short-circuited triodes and increased electron transmission and conversion efficiency
[NASA-CASE-XLE-01015] c03 N69-39898

Thermionic converter for converting heat energy directly into electrical energy
[NASA-CASE-XLE-01903] c22 N71-23599

Thermionic cesium diode converter with cavity emitters
[NASA-CASE-NPO-10412] c09 N71-28421

Development and characteristics of solar cells with phosphors in cover glass to improve response to solar ultraviolet radiation
[NASA-CASE-ARC-10050] c03 N71-33409

Reactor heated in-core diodes for energy conversion
[NASA-CASE-NPO-10542] c09 N72-27228

High current electrical lead --- for thermionic converters
[NASA-CASE-LEW-10950-1] c33 N74-27683

Electric power generation system directory from laser power
[NASA-CASE-NPO-13208-1] c36 N75-30524

Nuclear thermionic converter --- tungsten-thorium oxide rods
[NASA-CASE-NPO-13121-1] c73 N77-18891

Cesium thermionic converters having improved electrodes
[NASA-CASE-LEW-12038-3] c44 N78-25555

THERMIONIC DIODES

Electric power system utilizing thermionic plasma diodes in parallel and heat pipes as cathodes
[NASA-CASE-XMP-05843] c03 N71-11055

Thermionic diode switch for use in high temperature region to chop current from dc source
[NASA-CASE-NPO-10404] c03 N71-12255

Micromicroampere current measuring circuit, with two subminiature thermionic diodes with filament cathodes
[NASA-CASE-XMP-00384] c09 N71-13530

Electric power system with thermionic diodes and circulatory liquid metal coolant lines
[NASA-CASE-MFS-14114] c33 N71-27862

Reactor heated in-core diodes for energy conversion
[NASA-CASE-NPO-10542] c09 N72-27228

THERMIONIC EMITTERS

Oxygen-doped tantalum emitter for thermionic devices such as cesium vapor diodes
[NASA-CASE-NPO-11138] c03 N70-34646

THERMIONIC POWER GENERATION

Control for nuclear thermionic power source
[NASA-CASE-NPO-13114-2] c73 N78-28913

Improved thermionic energy converters
[NASA-CASE-LEW-12443-1] c44 N81-19561

THERMISTORS

Matched thermistors for microwave power meters with compensation for temperature changes
[NASA-CASE-NPO-10348] c10 N71-12554

Thermistor holder for skin temperature measurements
[NASA-CASE-ARC-10855-1] c52 N77-10780

Wedge immersed thermistor bolometers
[NASA-CASE-XGS-01245-1] c35 N79-33449

THERMOCHROMATIC MATERIALS

Thermochromic compositions for detecting heat levels in electronic circuits and devices
[NASA-CASE-NPO-10764-1] c14 N73-14428

Heat detection and compositions and devices therefor
[NASA-CASE-NPO-10764-2] c35 N75-25122

THERMOCOUPLE PYROMETERS

Dual measurement ablation sensor
[NASA-CASE-LAR-10105-1] c34 N74-15652

THERMOCOUPLES

Heat flux sensor assembly with proviso for heat shield to reduce radiative transfer between sensor elements
[NASA-CASE-XMS-05909-1] c14 N69-27459

Gas cooled high temperature thermocouple
[NASA-CASE-XLE-09475-1] c33 N71-15568

Control of fusion welding through use of thermocouple wire
[NASA-CASE-MFS-06074] c15 N71-20393

Heat sensing instrument, using thermocouple junction connected under heavy conducting

- material
[NASA-CASE-XLA-01551] c14 N71-22589
Design and characteristics of thermocouples
consisting of flexible tape for improved
attachment to temperature source
[NASA-CASE-XNP-01659] c14 N71-23039
Mixed liquid and vapor phase analyzer design
with thermocouples for relative heat transfer
measurement
[NASA-CASE-NPO-10691] c14 N71-26199
Development of thermocouple instrument for
measuring temperature of wall heated by
flowing fluid without disturbing boundary layer
[NASA-CASE-XLE-05230] c14 N72-27410
Thermocouple apparatus for measuring wall
temperatures in regeneratively cooled rocket
engines having thin walled cooling passages
[NASA-CASE-XLE-05230-2] c14 N73-13417
Electrical resistance butt welder for welding
fine gauge tungsten/rhenium thermocouple wire
[NASA-CASE-LAR-10103-1] c15 N73-14468
Development of flexible thermocouple in form of
tape for adaptation to special temperature
measuring conditions
[NASA-CASE-LEW-11072-1] c14 N73-24472
Thermocouple tape --- developed from
thermoelectrically different metals
[NASA-CASE-LEW-11072-2] c35 N76-15434
Thermocouple installation
[NASA-CASE-NPO-13540-1] c35 N77-14409
Thermocouples of tantalum and rhenium alloys for
more stable vacuum-high temperature performance
[NASA-CASE-LEW-12050-1] c35 N77-32454
Thermocouples of molybdenum and iridium alloys
for more stable vacuum-high temperature
performance
[NASA-CASE-LEW-12174-2] c35 N79-14346
Solar energy control system
[NASA-CASE-MFS-25287-1] c44 N80-17544
Thermocouple, multiple junction reference oven
[NASA-CASE-FRC-10112-1] c35 N81-26431
- THERMODYNAMIC CYCLES**
Solar engine --- Flat plate type
[NASA-CASE-LAR-12148-1] c44 N79-29608
- THERMODYNAMIC EFFICIENCY**
Automatic compression adjusting mechanism for
internal combustion engines
[NASA-CASE-MSC-18807-1] c37 N81-29442
- THERMODYNAMIC PROPERTIES**
Development of equipment for measuring thermal
shock resistance of thin discs of material
[NASA-CASE-XLE-02024] c14 N71-22964
Characteristics of foamed-in-place ceramic
refractory insulating material and method of
fabrication
[NASA-CASE-XGS-02435] c18 N71-22998
Operating properties of superconducting magnet
in vacuum environment
[NASA-CASE-XNP-06503] c23 N71-29049
Cobalt-tungsten alloys with superlattice strength at
elevated temperatures
[NASA-CASE-LEW-10436-1] c17 N73-32415
- THERMOELECTRIC GENERATORS**
Use of silicon controlled rectifier shorting
circuit to protect thermoelectric generator
source from thermal destruction
[NASA-CASE-XGS-04808] c03 N69-25146
Procedure for segmenting lead telluride and
silicon germanium thermoelectric elements to
obtain composite elements effective over wide
temperature range
[NASA-CASE-XGS-05718] c26 N71-16037
Low weight, integrated thermoelectric
generator/antenna combination for spacecraft
[NASA-CASE-XER-09521] c09 N72-12136
Thermally cascaded thermoelectric generator with
radioisotopic heat source
[NASA-CASE-NPO-10753] c03 N72-26031
- THERMOELECTRIC MATERIALS**
Bonding method for improving contact between
lead telluride thermoelectric elements and
tungsten electrodes
[NASA-CASE-XGS-04554] c15 N69-39786
Procedure for segmenting lead telluride and
silicon germanium thermoelectric elements to
obtain composite elements effective over wide
temperature range
[NASA-CASE-XGS-05718] c26 N71-16037
- THERMOELECTRIC POWER GENERATION**
Thermoelectric power conversion by liquid metal
flowing through magnetic field
[NASA-CASE-XNP-00644] c03 N70-36803
Operation method for combined electrolysis
device and fuel cell using molten salt to
produce power by thermoelectric regeneration
mechanism
[NASA-CASE-XLE-01645] c03 N71-20904
Thermoelectric power system --- for spacecraft
[NASA-CASE-MFS-22002-1] c44 N76-16612
- THERMOELECTRICITY**
Development of flexible thermocouple in form of
tape for adaptation to special temperature
measuring conditions
[NASA-CASE-LEW-11072-1] c14 N73-24472
Device for measuring thermoelectric properties
of materials under high pressure
[NASA-CASE-NFO-11749] c14 N73-28486
- THERMOLUMINESCENCE**
Method for detecting oxygen in gas by
thermoluminescence
[NASA-CASE-LAR-10668-1] c06 N73-16106
Thermoluminescent aerosol analysis
[NASA-CASE-LAR-12046-1] c25 N78-15210
- THERMOMAGNETIC EFFECTS**
Thermomagnetic recording and magneto-optic
playback system having constant intensity
laser beam control
[NASA-CASE-NFO-11317-2] c36 N74-13205
Thermomagnetic recording and magnetic-optic
playback system
[NASA-CASE-NFO-10872-1] c35 N79-16246
- THERMOMETERS**
Platinum resistance thermometer circuit
[NASA-CASE-MSC-12327-1] c35 N77-27368
- THERMOPHYSICAL PROPERTIES**
Method for determining thermo-physical
properties of specimens --- photographic
recording of changes in thin film phase-change
temperature indicating material in wind tunnel
[NASA-CASE-LAR-11053-1] c25 N74-18551
Apparatus for determining thermophysical
properties of test specimens
[NASA-CASE-LAR-11883-1] c09 N77-27131
- THERMOPILES**
Differential thermopile for measuring cooling
water temperature rise
[NASA-CASE-XAC-00812] c14 N71-15598
Horizon sensor design with digital sampling of
spaced radiation-compensated thermopile
infrared detectors
[NASA-CASE-XNP-06957] c14 N71-21088
Development of thermopile with sensor surface to
receive radiant energy and to provide
measurement of energy quantity
[NASA-CASE-NFO-11493] c14 N73-12447
- THERMOPLASTIC RESINS**
Formulated plastic separators for soluble
electrode cells
[NASA-CASE-LEW-12358-2] c25 N78-25149
Boron trifluoride coatings for thermoplastic
materials and method of applying same in glow
discharge
[NASA-CASE-ABC-11057-1] c27 N78-31233
Thermoplastic rubber comprising ethylene-vinyl
acetate copolymer, asphalt and fluxing oil
[NASA-CASE-NFO-08835-1] c27 N78-33228
Induction heating gun
[NASA-CASE-LAR-12540-1] c37 N80-11468
One step dual purpose joining technique
[NASA-CASE-LAR-12595-1] c37 N80-11469
Membrane consisting of polyquaternary amine ion
exchange polymer network interpenetrating the
chains of thermoplastic matrix polymer
[NASA-CASE-NFO-14001-1] c27 N81-14076
Thermoset-thermoplastic aromatic polyamides
[NASA-CASE-LAR-12723-1] c27 N81-15107
- THERMOPLASTICITY**
Process for preparing thermoplastic aromatic
polyimides
[NASA-CASE-LAR-11828-1] c27 N78-32261
Heat sealable, flame and abrasion resistant
coated fabric
[NASA-CASE-MSC-18382-1] c27 N80-24440
- THERMOREGULATION**
Thermoregulating with cooling flow pipe network
for humans
[NASA-CASE-XMS-10269] c05 N71-24147

THERMOSETTING RESINS

Vacuum method for molding thermosetting compounds used as ablative materials
[NASA-CASE-XLA-01091] c15 N71-10672

Procedure for bonding polytetrafluoroethylene thermal protective sleeves to magnesium alloy conical shell components with different thermal coefficients
[NASA-CASE-XLA-01262] c15 N71-21404

Method for honeycomb panel bonding by thermosetting film adhesive with electrical heat means
[NASA-CASE-XMF-01402] c18 N71-21651

Heat treatment and tooling for forming shapes from thermosetting honeycomb core sheets
[NASA-CASE-NPO-11036] c15 N72-24522

Fluorinated polyurethanes produced by reacting hydroxy terminated perfluoro polyether with diisocyanate
[NASA-CASE-NPO-10767-2] c06 N72-27151

Evacuated displacement compression molding
[NASA-CASE-LAR-10782-1] c31 N74-14133

Method for compression molding of thermosetting plastics utilizing a temperature gradient across the plastic to cure the article
[NASA-CASE-LAR-10489-1] c51 N74-18124

Evacuated, displacement compression mold --- of tubular bodies from thermosetting plastics
[NASA-CASE-LAR-10782-2] c31 N75-13111

Cork-resin ablative insulation for complex surfaces and method for applying the same
[NASA-CASE-MPS-23626-1] c24 N80-26388

Thermoset-thermoplastic aromatic polyamides
[NASA-CASE-LAR-12723-1] c27 N81-15107

Polymeric compositions and their method of manufacture --- forming filled polymer systems using cryogenics
[NASA-CASE-NPO-10424-1] c27 N81-24258

THERMOSTATS

Thermal switch for transferring excess heat from one region to another heat dissipating one
[NASA-CASE-XNP-00463] c33 N70-36847

Design and development of linear actuator based on bimetallic spring expansion
[NASA-CASE-NPO-10637] c15 N72-12409

Thermostatically controlled non-tracking type solar energy concentrator
[NASA-CASE-NPO-13497-1] c44 N76-14602

Automatic thermal switch
[NASA-CASE-GSC-12553-1] c33 N80-21671

THICK FILMS

Material compositions and processes for developing dielectric thick films used in microcircuit capacitors
[NASA-CASE-LAR-10294-1] c26 N72-28762

THICKNESS

Myocardium wall thickness transducer and measuring method
[NASA-CASE-NPO-13644-1] c52 N76-29895

Thickness measurement system
[NASA-CASE-MPS-23721-1] c31 N79-28370

Strong thin membrane structure --- solar sails
[NASA-CASE-NPO-14021-2] c27 N80-16163

THIN FILMS

Temperature sensitive capacitor device for detecting very low intensity infrared radiation
[NASA-CASE-XNP-09750] c14 N69-39937

Means and methods of depositing thin films on substrates
[NASA-CASE-XNP-00595] c15 N70-34967

Method of forming thin window drifted silicon charged particle detector
[NASA-CASE-XLE-00808] c24 N71-10560

Describing apparatus used in vacuum deposition of thin film inductive windings for spacecraft microcircuitry
[NASA-CASE-XMF-01667] c15 N71-17647

Describing method for vapor deposition of gallium arsenide films to manganese substrates to provide semiconductor devices with low resistance substrates
[NASA-CASE-XNP-01328] c26 N71-18064

Development of stable electronic amplifier adaptable for monolithic and thin film construction
[NASA-CASE-XGS-02812] c09 N71-19466

Sputter proof evaporant source design for use in vacuum deposition of solid thin films on substrates

[NASA-CASE-XMF-06065] c15 N71-20395

Binding layer of semiconductor particles by electrodeposition
[NASA-CASE-XNP-01959] c26 N71-23043

Device for high vacuum film deposition with electromagnetic ion steering
[NASA-CASE-NPO-10331] c09 N71-26701

Magnetic recording head composed of ferrite core coated with thin film of aluminum-iron-silicon alloy
[NASA-CASE-GSC-10097-1] c08 N71-27210

Thin film capacitive bolometer and capacitance temperature interchange sensor
[NASA-CASE-NFO-10607] c09 N71-27232

Electrical connections for thin film hybrid microcircuits
[NASA-CASE-XMS-02182] c10 N71-28783

Single crystal film semiconductor devices
[NASA-CASE-ERC-10222] c09 N72-22199

Waveguide, thin film window and microwave irises
[NASA-CASE-LAR-10513-1] c07 N72-25170

Thin absorbing metallic film for increased visible light transmission
[NASA-CASE-LAR-10P36-1] c26 N72-27784

Development of thin film microwave iris installed in microwave waveguide transverse to flow of energy in waveguide
[NASA-CASE-LAR-10511-1] c09 N72-29172

Development of procedure for producing thin transparent films of zinc oxide on transparent refractory substrate
[NASA-CASE-FRC-10019] c15 N73-12487

Process for analysis of strain field of structures subjected to large deformations involving low modulus substrate with thin coating
[NASA-CASE-LAR-10765-1] c32 N73-20740

Dual wavelength system for monitoring film deposition
[NASA-CASE-MPS-20675] c26 N73-26751

Thin film analyzer utilizing holographic techniques
[NASA-CASE-MPS-20823-1] c16 N73-30476

Transparent switchboard which permits optical display devices to be adapted for use in man machine communications
[NASA-CASE-MSC-13746-1] c10 N73-32143

Method for determining thermo-physical properties of specimens --- photographic recording of changes in thin film phase-change temperature indicating material in wind tunnel
[NASA-CASE-LAR-11053-1] c25 N74-18551

Method of preparing water purification membranes --- polymerization of allyl amine as thin films in plasma discharge
[NASA-CASE-ARC-10643-1] c25 N75-12087

System for depositing thin films
[NASA-CASE-MPS-20775-1] c31 N75-12161

Method of producing a storage bulb for an atomic hydrogen maser
[NASA-CASE-NPO-13050-1] c36 N75-15029

Integrated structure vacuum tube
[NASA-CASE-ARC-10445-1] c31 N76-31365

Method of forming metal hydride films
[NASA-CASE-LFW-12083-1] c37 N78-13436

Strong thin membrane structure --- solar sails
[NASA-CASE-NFO-14021-2] c27 N80-16163

Method of forming dynamic membrane on stainless steel support
[NASA-CASE-MSC-18172-1] c26 N80-19237

Partial interlaminar separation system for composites
[NASA-CASE-LAR-12065-1] c24 N81-14000

THIN PLATES

Dichroic plate --- as bandpass filters
[NASA-CASE-NPO-13506-1] c35 N76-15435

Adjustable securing base
[NASA-CASE-MSC-19666-1] c37 N78-17383

THIN WALLED SHELLS

Thin walled pressure test vessel using low-melting alloy-filled joint to attach shell to heads
[NASA-CASE-XLE-04677] c15 N71-10577

THIN WALLS

Channel-type shell construction for rocket engines and related configurations
[NASA-CASE-XLE-00144] c28 N70-34860

Sealed separable connection for thin wall metal tube

- [NASA-CASE-NPO-10064] c15 N71-17693
Low mass truss structure with elongated thin-walled tubular segments
[NASA-CASE-LAR-10546-1] c11 N72-25287
Development of differential pressure control system using motion of mechanical diaphragms to operate electric switch
[NASA-CASE-MPS-14216] c14 N73-13418
Method of fabricating an article with cavities --- with thin bottom walls
[NASA-CASE-LAR-10318-1] c31 N74-18689
Method of fabricating an object with a thin wall having a precisely shaped slit
[NASA-CASE-LAR-10409-1] c31 N74-21059
- THORIUM FLUORIDES**
Ultraviolet filter of thorium fluoride and cryolite on quartz base
[NASA-CASE-XNP-02340] c23 N69-24332
- THORIUM OXIDES**
Nuclear thermionic converter --- tungsten-thorium oxide rods
[NASA-CASE-NPO-13121-1] c73 N77-18891
- THREADS**
Gage for quality control of sealing surfaces of threaded boss
[NASA-CASE-XMF-04966] c14 N71-17658
Threadless fastener apparatus comprising receiving apertures for plurality of articles, self-locked condition, and capable of using nonmalleable materials in both ends
[NASA-CASE-XPR-05302] c15 N71-23254
- THREE DIMENSIONAL MOTION**
Solid state controller three axes controller
[NASA-CASE-MSC-12394-1] c08 N74-10542
- THRESHOLD GATES**
Apparatus with summing network for compression of analog data by decreasing slope threshold sampling
[NASA-CASE-NPO-10769] c08 N72-11171
Radiation hardening of MOS devices by boron --- for stabilizing gate threshold potential
[NASA-CASE-GSC-11425-2] c76 N75-25730
- THRESHOLD LOGIC**
Silicon controlled rectifier pulse gate amplifier for blocking false gating caused by negative transient voltages
[NASA-CASE-XLA-07497] c09 N71-12514
- THROATS**
Method of making a rocket nozzle
[NASA-CASE-XMF-06884-1] c20 N79-21123
- THRUST AUGMENTATION**
Exhaust nozzle with afterburning for generating thrust
[NASA-CASE-XLA-00154] c28 N70-33374
Construction and method of arranging plurality of ion engines to form cluster thereby increasing efficiency and control by decreasing heat radiated to space
[NASA-CASE-XNP-02923] c28 N71-23081
Reversed cowl flap inlet thrust augmentor --- with adjustable airfoil
[NASA-CASE-ARC-10754-1] c07 N75-24736
Method and apparatus for rapid thrust increases in a turbofan engine
[NASA-CASE-LEW-12971-1] c07 N80-18639
Thrust augmented spin recovery device
[NASA-CASE-LAR-11970-2] c08 N81-19130
- THRUST BEARINGS**
Thrust bearing
[NASA-CASE-LEW-11949-1] c37 N76-29588
- THRUST CHAMBER PRESSURE**
Pitch attitude stabilization system utilizing engine pressure ratio feedback signals
[NASA-CASE-LAR-12562-1] c18 N81-26152
- THRUST CHAMBERS**
Rocket chamber leak test fixture using tubular plug
[NASA-CASE-XPR-09479] c14 N69-27503
Supporting and protecting frame structure and plug for empty thrust chamber assembly, handling, and shipping
[NASA-CASE-XMF-00580] c11 N70-35383
Large area-ratio nozzles for rocket motor thrust chambers
[NASA-CASE-XLE-00145] c28 N70-36806
Method for shaping regeneratively cooled rocket motor casing having minimum thickness at each channel cross section
[NASA-CASE-XLE-00409] c28 N71-15658
- Regeneratively cooled rocket motor casing with tapered channels to insure minimum thicknesses at each channel cross section for necessary strength requirements
[NASA-CASE-XLE-05689] c28 N71-15659
Rocket engine injector orifice to accommodate changes in density, velocity, and pressure, thereby maintaining constant mass flow rate of propellant into rocket combustion chamber
[NASA-CASE-XLE-03157] c28 N71-24736
Fuel and oxidizer injection head for thrust chamber of reaction engine
[NASA-CASE-NPO-10046] c28 N72-17843
Continuous gas flow control by fluidic proportional thruster system
[NASA-CASE-ABC-10106-1] c28 N72-22769
Radial magnetic field for ion thruster
[NASA-CASE-LEW-10770-1] c28 N72-22770
Thermal flux transfer system for maintaining thrust chamber of operative reaction motor at given temperatures
[NASA-CASE-NPO-12070-1] c28 N73-32606
Heat exchanger --- rocket combustion chambers and cooling systems
[NASA-CASE-LEW-12252-1] c34 N79-13288
Heat exchanger and method of making --- bonding rocket chambers with a porous metal matrix
[NASA-CASE-LEW-12441-1] c34 N79-13289
- THRUST CONTROL**
Electromechanical actuator and its use in rocket thrust control valve
[NASA-CASE-XNP-05975] c15 N69-23185
Solid propellant rocket vehicle thrust control method and apparatus
[NASA-CASE-XNP-00217] c28 N70-38181
Thrust and attitude control apparatus using jet nozzle in movable canard surface or fin configuration
[NASA-CASE-XLE-03583] c31 N71-17629
Detonation reaction engine comprising outer housing enclosing pair of inner walls for continuous flow
[NASA-CASE-XMF-06926] c28 N71-22983
Low mass ionizing device for use in electric thrust spacecraft engines
[NASA-CASE-XNP-01954] c28 N71-28850
Heated porous plug microthruster for spacecraft reaction jet controlled systems such as fuel flow regulation, propellant disassociation, and heat transfer augmentation
[NASA-CASE-GSC-10640-1] c28 N72-18766
Multi-purpose wind tunnel reaction control model block
[NASA-CASE-MSC-19706-1] c09 N78-31129
Fluid thrust control system --- for liquid propellant rocket engines
[NASA-CASE-XMF-05964-1] c20 N79-21124
- THRUST LOADS**
Thrust measurement
[NASA-CASE-XMS-05731] c35 N75-29382
- THRUST MEASUREMENT**
Dynamometer measuring microforce thrust produced by ion engine
[NASA-CASE-XLE-00702] c14 N70-40203
Development of thrust dynamometer for measuring performance of jet and rocket engines
[NASA-CASE-XLE-05260] c14 N71-20429
Development of temperature compensated thrust measuring gage for measuring forces as function of time in environment with varying temperature
[NASA-CASE-XGS-02319] c14 N71-22965
Micro-pound extended range thrust stand for small rocket engines
[NASA-CASE-GSC-10710-1] c28 N71-27094
- THRUST VECTOR CONTROL**
Thrust vector control by secondary injection of fluid into rocket nozzle flow field to separate exhaust flow
[NASA-CASE-XLE-00208] c28 N70-34294
High velocity guidance and spin stabilization gyro controlled jet reaction system for launch vehicle payloads
[NASA-CASE-XLA-01339] c31 N71-15692
Ion beam deflector system for electronic thrust vector control for ion propulsion yaw, pitch, and roll forces
[NASA-CASE-LEW-10689-1] c28 N71-26173

- Tertiary flow injection system for thrust vectoring of propulsive nozzle flow
[NASA-CASE-MFS-20831] c28 N71-29153
- Development of thrust control system for application to control of aircraft and spacecraft
[NASA-CASE-MSC-13397-1] c21 N72-25595
- Development of vortex fluid amplifier for throttling rocket exhaust
[NASA-CASE-LBW-10374-1] c28 N73-13773
- System for imposing directional stability on a rocket-propelled vehicle
[NASA-CASE-MFS-21311-1] c20 N76-21275
- THRUST-WEIGHT RATIO**
Launch pad missile release system with bending moment change rate reduction in thrust distribution structure at liftoff
[NASA-CASE-MNF-03198] c30 N70-40353
- THRISTORS**
Electrical power generating system --- for windpowered generation
[NASA-CASE-MFS-24368-3] c33 N81-22280
- TILES**
Strain arrestor plate for fused silica tile --- bonding of thermal insulation to metallic plates or structural parts
[NASA-CASE-MSC-14182-1] c27 N76-14264
- Diced tile thermal protection for spacecraft
[NASA-CASE-MSC-16366-1] c24 N79-23142
- Improved attachment system for silica tiles --- thermal protection for space shuttle orbiter
[NASA-CASE-MSC-18741-1] c16 N81-16110
- Apparatus for accurately preloading auger attachment means for frangible protective material
[NASA-CASE-MSC-18791-1] c37 N81-24446
- Densification of porous refractory substrates --- space shuttle orbiter tiles
[NASA-CASE-MSC-18737-1] c25 N81-29180
- Method of repairing surface damage to porous refractory substrates --- shuttle orbiter tiles
[NASA-CASE-MSC-18736-1] c27 N81-29231
- TILT WING AIRCRAFT**
Free wing assembly for an aircraft
[NASA-CASE-FRC-10092-1] c05 N79-12061
- TIME CONSTANT**
Variable time constant, wide frequency range smoothing network for noise removal from pulse chains
[NASA-CASE-XGS-01983] c10 N70-41964
- TIME DEPENDENCE**
An instrument for determining coincidence and elapse time between independent sources of random sequential events
[NASA-CASE-LAR-12531-1] c35 N81-31529
- TIME DISCRIMINATION**
Extra-long monostable multivibrator employing bistable semiconductor switch to allow charging of timing circuit
[NASA-CASE-XGS-00381] c09 N70-34819
- TIME DIVISION MULTIPLEXING**
Synchronizing apparatus for multi-access satellite time division multiplex system
[NASA-CASE-XGS-05918] c07 N69-39574
- Time division multiplexer with magnetic latching relays
[NASA-CASE-MNF-00431] c09 N70-38998
- Data processor having multiple sections activated at different times by selective power coupling to sections
[NASA-CASE-XGS-04767] c08 N71-12494
- Minimum time delay unit for conventional time multiplexed data compression channels
[NASA-CASE-MNF-08832] c08 N71-12506
- Time division relay synchronizer with master sync pulse for activating binary counter to produce signal identifying time slot for station
[NASA-CASE-GSC-10373-1] c07 N71-19773
- Sampling circuit for signal processing in multiplex transmission by Fourier analysis
[NASA-CASE-MFO-10388] c07 N71-24622
- Time division multiplexed telemetry transmitting system controlled by programmed memory
[NASA-CASE-GSC-10131-1] c07 N71-24624
- TIME FUNCTIONS**
Cathode ray oscilloscope for analyzing electrical waveforms representing amplitude distribution of time function
[NASA-CASE-MNF-01383] c09 N71-10659
- TIME LAG**
Closed loop radio communication ranging system to determine distance between moving airborne vehicle and fixed ground station
[NASA-CASE-MNF-01501] c21 N70-41930
- Minimum time delay unit for conventional time multiplexed data compression channels
[NASA-CASE-MNF-08832] c08 N71-12506
- Apparatus for estimating amplitude and sign of phase difference or time lag between two signals
[NASA-CASE-MFO-11203] c10 N72-20224
- Automatic transponder --- measurement of the internal delay time of a transponder
[NASA-CASE-GSC-12075-1] c32 N77-31350
- Time delay and integration detectors using charge transfer devices
[NASA-CASE-GSC-12324-1] c33 N81-33403
- TIME MEASUREMENT**
Time domain phase measuring apparatus
[NASA-CASE-GSC-12228-1] c33 N79-10338
- TIME MEASURING INSTRUMENTS**
Mechanism for measuring nanosecond time differences between luminous events using streak camera
[NASA-CASE-XLA-01987] c23 N71-23976
- TIME OF FLIGHT SPECTROMETERS**
Design and characteristics of time of flight mass spectrometer to measure or analyze gases at low pressures and time of flight of single gas molecule
[NASA-CASE-MNF-01056] c14 N71-23041
- TIME SERIES ANALYSIS**
Device for performing statistical time-series analysis of complex electrical signal waveforms
[NASA-CASE-MSC-12428-1] c10 N73-25240
- TIME SHARING**
Integrated time shared instrumentation display for aerospace vehicle simulators
[NASA-CASE-XLA-01952] c08 N71-12507
- TIME SIGNALS**
Monitoring system for signal amplitude ranges over predetermined time interval
[NASA-CASE-MNS-04061-1] c09 N69-39885
- Development of method for synchronizing clocks at several ground stations based on signals received from spacecraft or satellites
[NASA-CASE-MNF-08875] c10 N71-23099
- Time synchronization system for synchronizing clocks at remote locations with master clock using moon reflected coded signals
[NASA-CASE-MFO-10143] c10 N71-26326
- Circuit for measuring wide range of pulse rates by utilizing high capacity counter
[NASA-CASE-MNF-06234] c10 N71-27137
- System for generating timing and control signals
[NASA-CASE-MFO-13125-1] c33 N75-19519
- Precise RF timing signal distribution to remote stations --- fiber optics
[NASA-CASE-MFO-14749-1] c32 N81-14186
- TIMING DEVICES**
Design and development of synchronous servo loop control system
[NASA-CASE-MNF-03744] c10 N71-20448
- Development of method for synchronizing clocks at several ground stations based on signals received from spacecraft or satellites
[NASA-CASE-MNF-08875] c10 N71-23099
- Development and characteristics of resettable monostable pulse generator with charge rundown-timing circuit
[NASA-CASE-GSC-11139] c09 N71-27016
- Data acquisition and processing system with buffer storage and timing device for magnetic tape recording of PCM data and timing information
[NASA-CASE-MFO-12107] c08 N71-27255
- High speed photo-optical time recorder for indicating time at exposure of each frame of high speed movie camera film
[NASA-CASE-KSC-10294] c14 N72-18411
- Method of and apparatus for double-exposure holographic interferometry
[NASA-CASE-MFS-25405-1] c35 N81-27459
- TIRES**
Temperature sensor warning system for pneumatic tires of aircraft and ground vehicles
[NASA-CASE-XLA-01926] c14 N71-15620
- Resilient wheel design with woven wire tire and abrasive treads for lunar surface vehicles

[NASA-CASE-MFS-13929] c15 N71-27091

TISSUES (BIOLOGY)

Servo-controlled intravital microscope system
[NASA-CASE-NPO-13214-1] c35 N75-25123

Method and system for in vivo measurement of bone tissue using a two level energy source
[NASA-CASE-MSC-14276-1] c52 N77-14737

System for and method of freezing biological tissue
[NASA-CASE-GSC-12173-1] c51 N79-10694

Coupling apparatus for ultrasonic medical diagnostic system
[NASA-CASE-NPO-13935-1] c52 N79-14751

Apparatus and method of inserting a microelectrode in body tissue or the like using vibration means
[NASA-CASE-NPO-13910-1] c52 N79-27636

Multifunctional transducer
[NASA-CASE-NPO-14329-1] c52 N81-20703

Enhancement of in vitro Guayule propagation
[NASA-CASE-NPO-15213-1] c51 N81-29728

TITANATES

Vacuum preparation of zinc titanate pigment resistant to loss of reflective properties
[NASA-CASE-MFS-13532] c18 N72-17532

TITANIUM

Joining aluminum to stainless steel by bonding aluminum coatings onto titanium coated stainless steel and brazing aluminum to aluminum/titanium coated steel
[NASA-CASE-MFS-07369] c15 N71-20443

Weld-bonded titanium structures
[NASA-CASE-LAR-11549-1] c37 N77-11397

Method of mitigating titanium impurities effects in p-type silicon material for solar cells
[NASA-CASE-NPO-14635-1] c44 N80-24741

TITANIUM ALLOYS

Method to prevent stress corrosion cracking in titanium alloys
[NASA-CASE-NPO-10271] c17 N71-16393

Chemical spot tests for identification of titanium and titanium alloys used in aerospace vehicles
[NASA-CASE-LAR-10539-1] c17 N73-12547

TITANIUM CARBIDES

Improved refractory coatings and method of producing the same
[NASA-CASE-LEW-13169-1] c26 N80-14232

TITANIUM NITRIDES

Improved refractory coatings --- sputtered coatings on substrates that form stable nitrides
[NASA-CASE-LEW-23169-2] c26 N81-16209

TITANIUM OXIDES

Method of preparing zinc orthotitanate pigment
[NASA-CASE-MFS-23345-1] c27 N77-30237

TOLERANCES (MECHANICS)

Mechanism for restraining universal joints to prevent separation while allowing bending, angulation, and lateral offset in any position about axis
[NASA-CASE-XNP-02278] c15 N71-28951

TOPOGRAPHY

System for plotting subsoil structure and method therefor
[NASA-CASE-NPO-14191-1] c51 N80-32584

TOOLS

Tool attachment for spreading or moving away loose elements from terminal posts during winding of filamentary elements
[NASA-CASE-XMF-02107] c15 N71-10809

Development of adjustable attitude guide block for setting pins perpendicular to irregular convex work surface
[NASA-CASE-XLA-07911] c15 N71-15571

Hand tool for forming dimples and nipples on end portion of tubes
[NASA-CASE-XMS-06876] c15 N71-21536

Tool for mounting and removing studs with adhesive coated head portion
[NASA-CASE-MFS-20299] c15 N72-11392

Insert facing tool --- manually operated cutting tool for forming studs in honeycomb material
[NASA-CASE-MFS-21485-1] c37 N74-25968

Stator rotor tools
[NASA-CASE-MSC-16000-1] c37 N78-24544

Computer circuit card puller
[NASA-CASE-FRC-11042-1] c37 N80-20589

Open ended ratchet type tubing cutter
[NASA-CASE-MSC-18538-1] c37 N80-22703

Apparatus for accurately preloading auger attachment means for frangible protective material
[NASA-CASE-MSC-18791-1] c37 N81-24446

TOOTH DISEASES

Process for preparing calcium phosphate salts for tooth repair
[NASA-CASE-FRC-10338] c04 N72-33072

TOPOGRAPHY

Method for observing the features characterizing the surface of a land mass
[NASA-CASE-FRC-11013-1] c43 N81-17499

TORCHES

Computer controlled apparatus for maintaining welding torch angle and velocity during seam tracking
[NASA-CASE-XMF-03287] c15 N71-15607

Development of electric weeding torch with casing on one end to form inert gas shield
[NASA-CASE-XMF-02330] c15 N71-23798

Computerized system for translating a torch head
[NASA-CASE-MFS-23620-1] c37 N79-10421

TOROIDAL SHELLS

Toroidal cell and battery --- storage battery for high amp-hour load applications
[NASA-CASE-LEW-12918-1] c44 N81-24521

TOROIDS

Flux gate magnetometer with toroidal gating coil and solenoidal output coil for signal modulation or amplification
[NASA-CASE-XGS-01881] c09 N70-40123

TORQUE

Gearing system for eliminating backlash and filtering input torque fluctuations from high inertia load
[NASA-CASE-XGS-04227] c15 N71-21744

Coupling arrangement for isolating torque loads from axial, radial, and bending loads
[NASA-CASE-XLA-04897] c15 N72-22482

High-torque open-end wrench
[NASA-CASE-NPO-13541-1] c37 N79-14383

Acoustic driving of rotor
[NASA-CASE-NPO-14005-1] c71 N79-20827

Magnetic field control --- electromechanical torquing devices
[NASA-CASE-MFS-23828-1] c33 N80-17359

Pressure suit joint analyzer
[NASA-CASE-ABC-11314-1] c54 N80-30043

TORQUE MOTORS

Low speed phaselock speed control system --- for brushless dc motor
[NASA-CASE-GSC-11127-1] c09 N75-24758

TORQUEMETERS

Remote-reading torquemeter for use where high horsepower are transmitted at high rotative speeds
[NASA-CASE-XLE-00503] c14 N70-34818

Torque meter for determining magnitude of torque generated by interaction of magnetic dipole between test specimen and ambient magnetic field
[NASA-CASE-XGS-01013] c14 N71-23725

TORSO

Restraint torso for increased mobility and reduced physiological effects while wearing pressurized suits
[NASA-CASE-MSC-12397-1] c05 N72-25119

Spacesuit torso closure
[NASA-CASE-ABC-11100-1] c54 N78-31736

TOUCH

Mechanically operated hand which can depress trigger using touch control device
[NASA-CASE-MFS-20413] c15 N72-21463

Measuring method for cutaneous perception using instrument with elongated tubular housing
[NASA-CASE-MSC-13609-1] c05 N72-25122

Prosthetic limb with tactile sensing device
[NASA-CASE-MFS-16570-1] c05 N73-32013

TOWERS

Aerial capsule emergency separation device using jettisonable towers
[NASA-CASE-XLA-00115] c03 N70-33343

TOXICITY AND SAFETY HAZARD

Apparatus for remote handling of materials --- mixing or analyzing dangerous chemicals
[NASA-CASE-LAR-10634-1] c37 N74-18123

TOXICOLOGY

System for continuous monitoring of exhalations, weighing, and cage cleaning for animal exposed to controlled atmosphere for toxic study

- [NASA-CASE-XAC-05333] c11 N71-22875
- TRACE CONTAMINANTS**
- Describing crystal oscillator instrument for detecting condensable gas contaminants in vacuum apparatus [NASA-CASE-NPO-10144] c14 N71-17701
- Heated tungsten filter for removing oxygen impurities from cesium [NASA-CASE-XNP-04262-2] c17 N71-26773
- Electric discharge for treatment of trace contaminants [NASA-CASE-ARC-10975-1] c33 N79-15245
- TRACE ELEMENTS**
- Ion microprobe mass spectrometer with cooled electrode target for analyzing traces of fluids [NASA-CASE-ERC-10014] c14 N71-28663
- Automated system for identifying traces of organic chemical compounds in aqueous solutions [NASA-CASE-NPO-13063-1] c25 N76-18245
- Nulling device for detection of trace gases by NDIR absorption [NASA-CASE-ARC-10760-1] c25 N76-22323
- Thermoluminescent aerosol analysis [NASA-CASE-LAR-12046-1] c25 N78-15210
- TRACKING (POSITION)**
- Sensor consisting of photocells mounted on pyramidal base for improved pointing accuracy of planetary trackers [NASA-CASE-XNP-04180] c07 N69-39736
- Telespectrograph for analyzing upper atmosphere by tracking bodies reentering atmosphere at high velocities [NASA-CASE-XLA-03273] c14 N71-18699
- Laser beam projector for continuous, precise alignment between target, laser generator, and astronomical telescope during tracking [NASA-CASE-NPO-11087] c23 N71-29125
- Mount for continuously orienting a collector dish in a system adapted to perform both diurnal and seasonal solar tracking [NASA-CASE-MPS-23267-1] c35 N77-20401
- System and method for tracking a signal source --- employing feedback control [NASA-CASE-HQN-10880-1] c17 N78-17140
- Sun tracking solar energy collector [NASA-CASE-NPO-13921-1] c44 N79-14526
- TRACKING FILTERS**
- System for phase locking onto carrier frequency signal located within receiver bandpass [NASA-CASE-XGS-04994] c09 N69-21543
- Apparatus and method for stabilized phase detection for binary signal tracking loops [NASA-CASE-MSC-16461-1] c33 N79-11313
- PN lock indicator for dithered PN code tracking loop [NASA-CASE-NPO-14435-1] c33 N81-33405
- TRACKING RADAR**
- Electronic and mechanical scanning control system for monopulse tracking antenna [NASA-CASE-XGS-05582] c07 N69-27460
- Phase locked loop with sideband rejecting properties in continuous wave tracking radar [NASA-CASE-XNP-02723] c07 N70-41680
- Interferometric tuning acquisition and tracking radar antenna system [NASA-CASE-XMS-09610] c07 N71-24625
- Acquisition and tracking system for optical radar [NASA-CASE-MPS-20125] c16 N72-13437
- TRACKING STATIONS**
- Optical monitor panel consisting of translucent screen with test or meter information projected onto it from rear for application in control rooms of missile launching and tracking stations [NASA-CASE-XKS-03509] c14 N71-23175
- Simultaneous acquisition of tracking data from two stations [NASA-CASE-NPO-13292-1] c32 N75-15854
- TRAFFIC CONTROL**
- Traffic survey system --- using optical scanners [NASA-CASE-MPS-22631-1] c66 N76-19888
- TRAILERS**
- Improved low-drag ground vehicle particularly suited for use in safely transporting livestock [NASA-CASE-FRC-11058-1] c85 N80-33312
- TRAILING-EDGE FLAPS**
- Double hinged flap for boundary layer control over trailing edges of wings [NASA-CASE-XLA-01290] c02 N70-42016
- Variable area exhaust nozzle [NASA-CASE-LEW-12378-1] c07 N79-14097
- Propulsive lateral control nozzle [NASA-CASE-LAR-12136-1] c08 N81-33210
- TRAINING SIMULATORS**
- Low and zero gravity simulator for astronaut training [NASA-CASE-MPS-10555] c11 N71-19494
- Apparatus for training astronaut crews to perform on simulated lunar surface under conditions of lunar gravity [NASA-CASE-XMS-04798] c11 N71-21474
- Kinesthetic control simulator --- for pilot training [NASA-CASE-LAR-10276-1] c09 N75-15662
- TRAJECTORY ANALYSIS**
- Table structure and rotating magnet system simulating gravitational forces on spacecraft and displaying trajectories between Earth, Venus, and Mercury [NASA-CASE-XNP-00708] c14 N70-35394
- Planetary atmospheric investigation using split trajectory dual flyby mode [NASA-CASE-XAC-08494] c30 N71-15990
- TRAJECTORY CONTROL**
- Spacecraft trajectory correction propulsion system [NASA-CASE-XNP-01104] c28 N70-39931
- Development of technique for control of free flight rocket vehicles [NASA-CASE-XLA-00937] c31 N71-17691
- Attitude stabilizer for nonguided missile or vehicle with respect to trajectory [NASA-CASE-ARC-10134] c30 N72-17873
- TRANSDUCERS**
- Fabrication of pressure-telemetry transducers [NASA-CASE-XNP-09752] c14 N69-21541
- Bootstrap unloading circuits for sampling transducer voltage sources without drawing current [NASA-CASE-XNP-09768] c09 N71-12516
- Transducer for measuring deflections from vibrating structures [NASA-CASE-XLA-03135] c32 N71-16428
- Describing device for surveying contour of surface using X-Y plotter and traveling transducer [NASA-CASE-XLA-08646] c14 N71-17586
- Rotary bead dropper and selector for testing micrometeorite transducers [NASA-CASE-XGS-03304] c09 N71-22988
- Development and characteristics of self-calibrating displacement transducer for measuring magnitude and frequency of displacement of bodies [NASA-CASE-XLA-00781] c09 N71-22999
- Transducer frame for use with extensometer to continuously monitor specimen sample [NASA-CASE-XLA-10322] c15 N72-17452
- Split range transducer [NASA-CASE-XLA-11189] c10 N72-20222
- Pulsed excitation voltage circuit for strain gage bridge transducers [NASA-CASE-FRC-10036] c09 N72-22200
- Passive type, magnifying scratch gage, force transducer [NASA-CASE-LAR-10496-1] c14 N72-22437
- Development of electronic detection system for remotely determining number and movement of enemy personnel [NASA-CASE-ARC-10097-2] c07 N73-25160
- Acoustical transducer calibrating system including differential pressure activating device [NASA-CASE-FRC-10060-1] c14 N73-27379
- Demodulator for carrier transducers [NASA-CASE-NUC-10107-1] c33 N74-17930
- LC-oscillator with automatic stabilized amplitude via bias current control --- power supply circuit for transducers [NASA-CASE-MPS-21698-1] c33 N74-26732
- Arterial pulse wave pressure transducer [NASA-CASE-GSC-11531-1] c52 N74-27566
- Diode-quad bridge circuit means [NASA-CASE-ARC-10364-3] c33 N75-19520
- Subminiature insertable force transducer --- including a strain gage to measure forces in muscles [NASA-CASE-NPO-13423-1] c33 N75-31329

Self-supporting strain transducer
[NASA-CASE-LAB-11263-1] c35 N75-33369

Miniature muscle displacement transducer
[NASA-CASE-NPO-13519-1] c33 N76-19338

Method and apparatus for nondestructive testing of pressure vessels
[NASA-CASE-NPO-12142-1] c38 N76-28563

Myocardium wall thickness transducer and measuring method
[NASA-CASE-NPO-13644-1] c52 N76-29895

Solar cell angular position transducer
[NASA-CASE-LAR-11999-1] c44 N80-18552

Simultaneous muscle force and displacement transducer
[NASA-CASE-NPO-14212-1] c52 N80-27072

Hot foil transducer skin friction sensor
[NASA-CASE-LAR-12321-1] c35 N81-12390

Optical crystal temperature gauge with fiber optic connections --- cryogenic systems
[NASA-CASE-MSC-16627-1] c74 N81-15818

Multifunctional transducer
[NASA-CASE-NPO-14329-1] c52 N81-20703

Heat pipe cooled probe
[NASA-CASE-LAR-12568-1] c44 N81-24525

Photomechanical transducer
[NASA-CASE-NPO-14363-1] c39 N81-25400

TRANSFORMERS

Impedance transformation device for signal mixing
[NASA-CASE-XGS-01110] c07 N69-24334

High impedance alternating current sensing transformer device between two bolometers for measuring insertion loss of test component
[NASA-CASE-XNP-01193] c10 N71-16057

Magnetic current regulator for saturable core transformer
[NASA-CASE-ERC-10075] c09 N71-24800

Unsaturating magnetic core transformer design with warning signal for electrical power processing equipment
[NASA-CASE-ERC-10125] c09 N71-24893

Development and characteristics of electronically resettable fuse with saturable core current sensing transformer having two outside legs and center leg
[NASA-CASE-XGS-11177] c09 N71-27001

Development and characteristics of voltage regulator for connection in series with alternating current source and load using three leg, two-window transformer
[NASA-CASE-ERC-10113] c09 N71-27053

Radial heat flux transformer for use in heating and cooling processes
[NASA-CASE-NPO-10828] c33 N72-17548

Current protection equipment for saturable core transformers
[NASA-CASE-ERC-10075-2] c09 N72-22196

Fail-safe multiple transformer circuit configuration
[NASA-CASE-NPO-11078] c09 N72-25262

Banded transformer cores
[NASA-CASE-NPO-11966-1] c33 N74-17928

Solid-state current transformer
[NASA-CASE-MFS-22560-1] c33 N77-14335

Transformer regulated self-stabilizing chopper
[NASA-CASE-XGS-09186] c33 N78-17295

Apparatus including a plurality of spaced transformers for locating short circuits in cables
[NASA-CASE-KSC-10899-1] c33 N79-18193

Circuit for automatic load sharing in parallel converter modules
[NASA-CASE-NPO-14056-1] c33 N79-24257

System for automatically switching transformer coupled lines
[NASA-CASE-MSC-16697-1] c33 N79-28415

Three phase power factor controller
[NASA-CASE-MFS-25535-1] c33 N81-12330

Non-contacting power transfer device
[NASA-CASE-GSC-12595-1] c33 N81-12331

Base drive for paralleled inverter systems
[NASA-CASE-NPO-14163-1] c33 N81-14220

Low current linearization of magnetic amplifier for dc transducer
[NASA-CASE-NPO-14617-1] c33 N81-24338

Push-pull converter with energy saving circuit for protecting switching transistors from peak power stress
[NASA-CASE-NPO-14316-1] c33 N81-33404

TRANSIENT HEATING

Thermocouple installation
[NASA-CASE-NPO-13540-1] c35 N77-14409

TRANSIST LOADS

Deployable cantilever support for deploying solar cell arrays aboard spacecraft and reducing transient loading
[NASA-CASE-NPO-10883] c31 N72-22874

TRANSISTOR AMPLIFIERS

Overcurrent protecting circuit for push-pull transistor amplifiers
[NASA-CASE-MSC-12033-1] c09 N71-13531

TRANSISTOR CIRCUITS

Low power drain transistor feedback circuit
[NASA-CASE-XGS-04999] c09 N69-24317

Design of transistorized ring counter circuit with special steering and triggering circuits
[NASA-CASE-XGS-03095] c09 N69-27463

BC transistor circuit to indicate each pulse of pulse train and occurrence of nth pulse
[NASA-CASE-XNP-00906] c09 N70-41655

Linear sawtooth voltage wave generator with transistor timing circuit having capacitor and zener diode feedback loops
[NASA-CASE-XMS-01315] c09 N70-41675

Switching circuit with regeneratively connected transistors eliminating power consumption when not in use
[NASA-CASE-XNP-02654] c10 N70-42032

High voltage transistor circuit
[NASA-CASE-XNP-06937] c09 N71-19516

Complementary regenerative transistorized switch circuit employing positive and negative feedback
[NASA-CASE-XGS-02751] c09 N71-23015

Inverter drive circuit for semiconductor switch
[NASA-CASE-LEW-10233] c10 N71-27126

Transistorized circuit for producing multiple slope voltage sweep
[NASA-CASE-XMS-03542] c09 N71-28926

Circuitry for high input impedance video processor with high noise immunity
[NASA-CASE-NFO-10199] c09 N72-17156

Ultra-stable oscillator with complementary transistors
[NASA-CASE-GSC-11513-1] c33 N74-20862

Inrush current limiter
[NASA-CASE-GSC-11789-1] c33 N77-14333

Temperature compensated current source
[NASA-CASE-MSC-11235] c33 N78-17294

Inductorless narrow-band filter/amplifier
[NASA-CASE-GSC-12410-1] c33 N79-24260

Push-pull converter with energy saving circuit for protecting switching transistors from peak power stress
[NASA-CASE-NPO-14316-1] c33 N81-33404

TRANSISTORS

Power supply with overload protection for series stage transistor
[NASA-CASE-XMS-00913] c10 N71-23543

Solid state circuit for switching alternating current input signal as function of direct current gating transistor
[NASA-CASE-XNP-06505] c10 N71-24799

Broadband distribution amplifier with complementary pair transistor output stages
[NASA-CASE-NPO-10003] c10 N71-26415

Transistorized switching logic circuits with tunnel diodes
[NASA-CASE-GSC-10878-1] c10 N72-22236

Inverted geometry transistor for use with monolithic integrated circuit
[NASA-CASE-ABC-10330-1] c09 N73-32112

Four phase logic systems --- including integrated microcircuits
[NASA-CASE-MSC-14240-1] c33 N75-14957

Complementary DMOS-VMOS integrated circuit structure
[NASA-CASE-GSC-12190-1] c33 N79-12321

Circuit for automatic load sharing in parallel converter modules
[NASA-CASE-NPO-14056-1] c33 N79-24257

Power converter --- for display devices, lighting equipment
[NASA-CASE-PRC-11014-1] c33 N79-27395

Base drive for paralleled inverter systems
[NASA-CASE-NPO-14163-1] c33 N81-14220

TRANSITION FLOW

Ablation article and surface for analyzing flow transition on ablative surface

- [NASA-CASE-LAR-10439-1] c33 N73-27796
TRANSITION TEMPERATURE
 Process for preparing thermoplastic aromatic polyimides
 [NASA-CASE-LAR-11828-1] c27 N78-32261
TRANSLATIONAL MOTION
 Centrifuge mounted motion simulator with elevator mechanism
 [NASA-CASE-XAC-00399] c11 N70-34815
 Development and characteristics of translating horizontal tail assembly for supersonic aircraft
 [NASA-CASE-XLA-08801-1] c02 N71-11043
 Semilinear bearing comprising two rows of roller bearings separated by spherical bearings and permitting rotational and translational movement
 [NASA-CASE-XLA-02809] c15 N71-22582
 Positioning mechanism for converting translatory motion into rotary motion
 [NASA-CASE-NPO-10679] c15 N72-21462
TRANSLATORS
 Serial data correlator/code translator
 [NASA-CASE-KSC-11025-1] c32 N79-28383
TRANSMISSION EFFICIENCY
 Microwave power transmission system wherein level of transmitted power is controlled by reflections from receiver
 [NASA-CASE-MFS-21470-1] c44 N74-19870
 Linear phase demodulator including a phase locked loop with auxiliary feedback loop
 [NASA-CASE-GSC-12018-1] c33 N77-14334
 Multistage depressed collector for dual mode operation --- for travelling wave tubes
 [NASA-CASE-LEW-15282-1] c33 N79-32463
TRANSMISSION LINES
 Portable equipment for validating C band launch pad antennas and transmission lines used for spacecraft checkout
 [NASA-CASE-XKS-10543] c07 N71-26292
 Collapsible antenna boom and coaxial transmission line having inflatable inner tube
 [NASA-CASE-MFS-20068] c07 N71-27191
 Phase modulator with tuned variable length electrical lines including coupling and varactor diode circuits
 [NASA-CASE-MSC-13201-1] c07 N71-28429
 Shielded flat conductor cable of ribbonlike wires laminates in thin flexible insulation
 [NASA-CASE-MFS-13687-2] c09 N72-22198
 Development of phase control coupling for use with phased array antenna
 [NASA-CASE-ERC-10265] c10 N73-16206
 Phase protection system for ac power lines
 [NASA-CASE-MSC-17832-1] c33 N74-14956
 System for stabilizing cable phase delay utilizing a coaxial cable under pressure
 [NASA-CASE-NPO-13138-1] c33 N74-17527
 Telephone multiline signaling using common signal pair
 [NASA-CASE-KSC-11023-1] c32 N79-23310
 High acceleration cable deployment system
 [NASA-CASE-ABC-11256-1] c37 N79-23432
 System for automatically switching transformer coupled lines
 [NASA-CASE-MSC-16697-1] c33 N79-28415
 A fiber optic transmission line stabilization apparatus and method
 [NASA-CASE-NPO-15036-1] c74 N80-34250
TRANSMISSIONS (MACHINE ELEMENTS)
 Compensating linkage for main rotor control
 [NASA-CASE-LAR-11797-1] c05 N81-19067
TRANSMITTANCE
 Electrical rotary joint apparatus for large space structures
 [NASA-CASE-MFS-23981-1] c33 N81-19394
TRANSMITTER RECEIVERS
 Low weight, integrated thermoelectric generator/antenna combination for spacecraft
 [NASA-CASE-XER-09521] c09 N72-12136
 Location identification system with ground based transmitter and aircraft borne receiver/decoder
 [NASA-CASE-ERC-10324] c07 N72-25173
 Automatic vehicle location system
 [NASA-CASE-NPO-11850-1] c32 N74-12912
 Digital communication system
 [NASA-CASE-MSC-13912-1] c32 N74-30524
TRANSMITTERS
 Temperature telemetric transmitter with frequency determining tank circuit for short range transmission
 [NASA-CASE-NPO-10649] c07 N71-24840
 Multicarrier communications system for transmitting modulated signals from single transmitter
 [NASA-CASE-NPO-11548] c07 N73-26118
 Miniature multichannel biotelemetry system
 [NASA-CASE-NFO-13065-1] c52 N74-26625
 Digital transmitter for data bus communications system
 [NASA-CASE-MSC-14558-1] c32 N75-21486
 Apparatus for endoscopic examination --- analysis of the propulsion system configuration and transmitter
 [NASA-CASE-NPO-14092-1] c52 N80-16725
TRANSONIC SPEED
 Construction of leading edges of surfaces for aerial vehicles performing from subsonic to above transonic speeds
 [NASA-CASE-XLA-01486] c01 N71-23497
TRANSONIC WIND TUNNELS
 Wind tunnel test section for simulating high Reynolds number over transonic speed range
 [NASA-CASE-MFS-20509] c11 N72-17183
TRANSPARENCY
 Transparent polycarbonate resin, shell helmet and latch design for high altitude and space flight
 [NASA-CASE-XMS-04935] c05 N71-11190
 Method and apparatus for producing an image from a transparent object
 [NASA-CASE-GSC-11989-1] c74 N77-28932
 Method of fabricating a photovoltaic module of a substantially transparent construction
 [NASA-CASE-NPO-14303-1] c44 N80-18550
 Heat transparent high intensity high efficiency solar cell
 [NASA-CASE-LEW-12892-1] c44 N81-27598
TRANSPIRATION
 Rocket chamber and method of making
 [NASA-CASE-LEW-11118-2] c20 N76-14191
TRANSPONDERS
 Equipment for testing of ground station ranging equipment and spacecraft transponders
 [NASA-CASE-XMS-05454-1] c07 N71-12391
 Spacecraft transponder and ground station radar system for mapping planetary surfaces
 [NASA-CASE-NFO-11001] c07 N72-21118
 Loop transponder for regenerating code of mu-type ranging system
 [NASA-CASE-NFO-11707] c07 N73-25161
 Automatic vehicle location system
 [NASA-CASE-NPO-11850-1] c32 N74-12912
 Simultaneous acquisition of tracking data from two stations
 [NASA-CASE-NPO-13292-1] c32 N75-15854
 Automatic transponder --- measurement of the internal delay time of a transponder
 [NASA-CASE-GSC-12075-1] c32 N77-31350
TRANSPORTATION
 Supporting and protecting frame structure and plug for empty thrust chamber assembly, handling, and shipping
 [NASA-CASE-XMF-00580] c11 N70-35383
TRANSVERSE ACCELERATION
 Rim inertial measuring system
 [NASA-CASE-LAR-12052-1] c18 N81-29152
TRAPS
 Deep trap, laser activated image converting system
 [NASA-CASE-NPO-13131-1] c36 N75-19652
TRAVELING WAVE AMPLIFIERS
 Serrodyne traveling wave tube reentrant amplifier for synchronous communication satellites operating at microwave frequencies
 [NASA-CASE-IGS-01022] c07 N71-16088
 Traveling wave solid state amplifier utilizing a semiconductor with negative differential mobility
 [NASA-CASE-HQH-10069] c33 N75-27251
 Ladder supported ring bar circuit
 [NASA-CASE-LEW-13570-1] c33 N81-24348
TRAVELING WAVE MASERS
 Design of folded traveling wave maser structure
 [NASA-CASE-XNF-05219] c16 N71-15550
 Comb type traveling wave maser amplifier for improved high gain broadband output
 [NASA-CASE-NFO-10548] c16 N71-24831
 Independent gain and bandwidth control of a traveling wave maser
 [NASA-CASE-NFO-13801-1] c36 N78-18410

TRAVELING WAVE TUBES

Segmented superconducting magnet producing staggered magnetic field and suitable for broadband traveling wave masers
[NASA-CASE-XGS-10518] c16 N71-28554

Traveling wave tube circuit
[NASA-CASE-LEW-12013-1] c33 N79-10339

Multistage depressed collector for dual node operation --- for travelling wave tubes
[NASA-CASE-LEW-13282-1] c33 N79-32463

Coupled cavity traveling wave tube with velocity tapering
[NASA-CASE-LEW-12296-1] c33 N80-19425

TRAVELING WAVES

Traveling wave maser for operation in 7 to 20 GHz frequency range
[NASA-CASE-NPO-11437] c16 N72-28521

TREADMILLS

Tread drum for animals --- having an electrical shock station
[NASA-CASE-ARC-10917-1] c51 N78-27733

TRIGGER CIRCUITS

Design of transistorized ring counter circuit with special steering and triggering circuits
[NASA-CASE-XGS-03095] c09 N69-27463

Triggering system for electric arc driven impulse wind tunnel
[NASA-CASE-XMF-00411] c11 N70-36513

Voltage range selection apparatus for sensing and applying voltages to electronic instruments without loading signal source
[NASA-CASE-XMS-00497] c14 N71-26244

One shot multivibrator circuit for producing long duration output pulses
[NASA-CASE-ARC-10137-1] c09 N71-28468

Voltage amplitude-responsive trigger circuit with silicon controlled rectifier
[NASA-CASE-GSC-10221-1] c09 N72-23171

Rapidly pulsed, high intensity, incoherent light source
[NASA-CASE-XLE-2529-3] c33 N74-20859

TRIGONOMETRY

Electrical and electromechanical trigonometric computation assembly and space vehicle guidance system for aligning perpendicular axes of two sets of three-axes coordinate references
[NASA-CASE-XMF-00684] c21 N71-21688

TRIMERS

New trifunctional alcohol derived from trimer acid and novel method of preparation
[NASA-CASE-NPO-10714] c06 N65-31244

Trimerization of aromatic nitriles
[NASA-CASE-LEW-12053-1] c27 N78-15276

Catalytic trimerization of aromatic nitriles and triaryl-s-triazine ring cross-linked high temperature resistant polymers and copolymers made thereby
[NASA-CASE-LEW-12053-2] c27 N79-28307

TRIODES

Vacuum thermionic converter with short-circuited triodes and increased electron transmission and conversion efficiency
[NASA-CASE-XLE-01015] c03 N69-39898

TRITIUM

Method for determining state of charge of alkali batteries by using tritium as tracer
[NASA-CASE-XNP-01464] c03 N71-10728

TROPICPAUSE

CAT altitude avoidance system
[NASA-CASE-NPO-15351-1] c47 N81-16677

TRUCKS

Fifth wheel
[NASA-CASE-FRC-10081-1] c37 N77-14477

Improved low-drag ground vehicle particularly suited for use in safely transporting livestock
[NASA-CASE-FRC-11058-1] c45 N80-33312

TRUSSES

Low mass truss structure with elongated thin-walled tubular segments
[NASA-CASE-LAR-10546-1] c11 N72-25287

Lightweight structural columns --- space erectable trusses
[NASA-CASE-LAR-12095-1] c31 N81-25258

Structural members, method and apparatus
[NASA-CASE-MSC-16217-1] c31 N81-27323

TUBE GRIDS

Method for fabricating solar cells having integrated collector grits

[NASA-CASE-LEW-12819-2]

c44 N79-18444

TUBE HEAT EXCHANGERS

High resistance cross flow heat exchangers for electrothermal rocket engines
[NASA-CASE-XLE-01783] c28 N70-34175

Gas chromatographic method for determining water in nitrogen tetroxide rocket propellant
[NASA-CASE-NPO-10234] c06 N72-17094

Liquid cooled brassiere and method of diagnosing malignant tumors therewith
[NASA-CASE-ARC-11007-1] c52 N77-14736

Solar energy receiver for a Stirling engine
[NASA-CASE-NPO-14619-1] c44 N81-17518

TUBES

Forming tubes from long thin flat metal strips
[NASA-CASE-XGS-04175] c15 N71-18579

Hermetic sealing device for ends of tubular bodies during materials testing operations
[NASA-CASE-NPO-10431] c15 N71-29132

TUMBLING MOTION

Tumbling motion system for object demagnetization
[NASA-CASE-XGS-02437] c15 N69-21472

Aircraft body-axis rotation measurement system
[NASA-CASE-FRC-11043-1] c06 N81-22048

TUMORS

Liquid cooled brassiere and method of diagnosing malignant tumors therewith
[NASA-CASE-ARC-11007-1] c52 N77-14736

TUNABLE LASERS

Tunable injection-locked pulsed CO2 laser
[NASA-CASE-NPO-14984-1] c36 N81-15350

TUNGSTEN

Bonding method for improving contact between lead telluride thermoelectric elements and tungsten electrodes
[NASA-CASE-XGS-04554] c15 N69-39786

Method for producing porous tungsten plates for ionizing cesium compounds for propulsion of ion engines
[NASA-CASE-XLE-00455] c28 N70-38197

Small plasma probe using tungsten wire collector in tubular shield
[NASA-CASE-XLE-02578] c25 N71-20747

Production method for manufacturing porous tungsten bodies from tungsten powder particles
[NASA-CASE-XNP-04339] c17 N71-29137

Vapor deposition method for forming metallized tungsten contacts on silicon substrates
[NASA-CASE-GSC-10695-1] c09 N72-25259

Nuclear thermionic converter --- tungsten-thorium oxide rods
[NASA-CASE-NPO-13121-1] c73 N77-18891

TUNGSTEN ALLOYS

Evaporating crucible of tantalum-tungsten foil, nickel alumina bonding agent, and ceramic coating
[NASA-CASE-XLA-03105] c15 N69-27483

Cobalt-tungsten alloys with superior strength at elevated temperatures
[NASA-CASE-LEW-10436-1] c17 N73-32415

Directionally solidified eutectic gamma plus beta nickel-base superalloys
[NASA-CASE-LEW-12906-1] c26 N77-32279

TUNING

Active tuned circuits for microelectronic construction
[NASA-CASE-GSC-11340-1] c10 N72-33230

Microwave generator using Gunn effect for magnetic tuning
[NASA-CASE-NPO-12106] c09 N73-15235

TUNNEL DIODES

Low power drain transistor feedback circuit
[NASA-CASE-XGS-04999] c09 N69-24317

TUNNELING (EXCAVATION)

Intrusion detection method and apparatus --- monitoring unwanted subterranean entry and departure
[NASA-CASE-ARC-11317-1] c35 N81-19430

TUNNELS

Deployable flexible tunnel
[NASA-CASE-MFS-22636-1] c37 N76-22540

TURBINE BLADES

Transpiration cooled turbine blade made from metallic or ceramic wires
[NASA-CASE-XLE-00020] c15 N70-33226

Modification and improvement of turbine blades for maximum cooling efficiency
[NASA-CASE-XLE-00092] c15 N70-33264

- Preparation of nickel alloys for jet turbine blades operating at high temperatures
[NASA-CASE-XLE-00151] c17 N70-32283
- External device for liquid spray cooling of gas turbine blades
[NASA-CASE-XLE-00037] c28 N70-33372
- Apparatus for liquid spray cooling of turbine blades
[NASA-CASE-XLE-00027] c33 N71-29152
- Process for welding compressor and turbine blades to rotors and discs of jet engines
[NASA-CASE-LEW-10533-1] c15 N73-28515
- Leading edge protection for composite blades
[NASA-CASE-LEW-12550-1] c24 N77-19170
- Fully plasma-sprayed compliant backed ceramic turbine seal
[NASA-CASE-LEW-13268-1] c37 N80-24619
- Improved method for driving two-phase turbines with enhanced efficiency
[NASA-CASE-NPO-15037-1] c37 N80-26660
- Wingtip vortex turbine
[NASA-CASE-LAR-12544-1] c67 N81-27096
- TURBINE ENGINES**
- High speed, self-acting shaft seal --- for use in turbine engines
[NASA-CASE-LEW-11274-1] c37 N75-21631
- Dual cycle aircraft turbine engine
[NASA-CASE-LAR-11310-1] c67 N77-28118
- Composite seal for turbomachinery --- backings for turbine engine shrouds
[NASA-CASE-LEW-12131-1] c37 N79-18318
- Self stabilizing sonic inlet
[NASA-CASE-LEW-11890-1] c05 N79-24976
- Composite seal for turbomachinery
[NASA-CASE-LEW-12131-2] c37 N80-26658
- TURBINE PUMPS**
- Pulsed energy power system for application of combustible gases to turbine controlling ac voltage generator
[NASA-CASE-MSC-13112] c03 N71-11057
- Portable cryogenic cooling system design including turbine pump, cooling chamber, and atomizer
[NASA-CASE-NPO-10467] c23 N71-26654
- Supersonic-combustion rocket
[NASA-CASE-LEW-11058-1] c20 N74-13502
- Supercharged topping rocket propellant feed system
[NASA-CASE-XLE-02062-1] c20 N80-14188
- TURBINE WHEELS**
- Locking device for retaining turbine rotor blades on turbine wheel
[NASA-CASE-KNP-00816] c28 N71-28528
- Apparatus for welding blades to rotors
[NASA-CASE-LEW-10533-2] c37 N74-11300
- Blade retainer assembly
[NASA-CASE-LEW-12608-1] c07 N77-27116
- TURBINES**
- Liquid-vapor interface seal design for turbine rotating shafts including helical and molecular pumps and liquid cooling of mercury vapor
[NASA-CASE-KNP-02862-1] c15 N71-26294
- Amplified wind turbine apparatus
[NASA-CASE-MFS-23830-1] c44 N80-21831
- TURBOCOMPRESSORS**
- Multistage multiple reentry axial flow reaction turbine with reverse flow reentry ducting
[NASA-CASE-XLE-00170] c15 N70-36412
- Apparatus and method for reducing thermal stress in a turbine rotor
[NASA-CASE-LEW-12232-1] c07 N79-10057
- Diesel engine catalytic combustor system --- turbocharging
[NASA-CASE-LEW-12995-1] c37 N80-26659
- TURBOFAN ENGINES**
- Supersonic fan blading --- noise reduction in turbofan engines
[NASA-CASE-LEW-11402-1] c07 N74-28226
- Noise suppressor --- for turbofan engine by incorporating annular acoustically porous elements in exhaust and inlet ducts
[NASA-CASE-LAR-11141-1] c07 N74-32418
- Noise suppressor for turbo fan jet engines
[NASA-CASE-ARC-10812-1] c07 N76-18131
- Variable thrust nozzle for quiet turbofan engine and method of operating same
[NASA-CASE-LEW-12317-1] c07 N78-17055
- Method and apparatus for rapid thrust increases in a turbofan engine
[NASA-CASE-LEW-12971-1] c07 N80-18039
- Integrated control system for a gas turbine engine
[NASA-CASE-LEW-12594-2] c07 N81-19116
- TURBOFANS**
- Dual output variable pitch turbofan actuation system
[NASA-CASE-LEW-12419-1] c07 N77-14025
- Reverse pitch fan with divided splitter
[NASA-CASE-LEW-12760-1] c07 N77-17059
- TURBOJET ENGINE CONTROL**
- Integrated control system for a gas turbine engine
[NASA-CASE-LEW-12594-2] c07 N81-19116
- TURBOJET ENGINES**
- Telescoping-spike supersonic nozzle for turbojet or ramjet engines
[NASA-CASE-XLE-00005] c28 N70-39899
- Design and development of gas turbine combustion unit with nozzle guide vanes for introducing diluent air into combustion gases
[NASA-CASE-XLE-103477-1] c28 N71-20330
- Reduction of nitric oxide emissions from a combustor
[NASA-CASE-ARC-10814-2] c07 N80-26298
- TURBOMACHINE BLADES**
- Platform for a swing root turbomachinery blade
[NASA-CASE-LEW-12312-1] c07 N77-32148
- Composite seal for turbomachinery
[NASA-CASE-LEW-12131-2] c37 N80-26658
- TURBOMACHINERY**
- Blade vibration damping pins for turbomachinery
[NASA-CASE-XLE-00155] c28 N71-29154
- Centrifugal-reciprocating compressor
[NASA-CASE-NPO-14597-1] c37 N79-23431
- TURBOSHAPTS**
- Remote-reading torque meter for use where high horsepower are transmitted at high rotative speeds
[NASA-CASE-XLE-00503] c14 N70-34818
- High speed, self-acting shaft seal --- for use in turbine engines
[NASA-CASE-LEW-11274-1] c37 N75-21631
- Improved method for driving two-phase turbines with enhanced efficiency
[NASA-CASE-NPO-15037-1] c37 N80-26660
- TURBULENCE METERS**
- Hot foil transducer skin friction sensor
[NASA-CASE-LAR-12321-1] c35 N81-12390
- TURBULENT FLOW**
- Exhaust flow deflector --- for ducted gas flow
[NASA-CASE-LAR-11570-1] c34 N76-18364
- System for measuring Reynolds in a turbulently flowing fluid --- signal processing
[NASA-CASE-ARC-10755-2] c34 N76-27517
- System for measuring three fluctuating velocity components in a turbulently flowing fluid
[NASA-CASE-ARC-10974-1] c34 N77-27345
- Detection of the transitional layer between laminar and turbulent flow areas on a wing surface --- using an accelerometer to measure pressure levels during wind tunnel tests
[NASA-CASE-LAR-12261-1] c02 N80-20224
- TURNSTILE ANTENNAS**
- Flexible turnstile antenna system for reducing nutation in spin-oriented satellites
[NASA-CASE-XMF-00442] c31 N71-10747
- Broadband modified turnstile antenna for use in space tracking and communications
[NASA-CASE-MSC-12209] c09 N71-24842
- Turnstile slot antenna
[NASA-CASE-GSC-11428-1] c32 N74-20864
- Turnstile and flared cone UHF antenna
[NASA-CASE-LAR-10970-1] c33 N76-14372
- TURRET**
- Indexing mechanism for cathode array substitution in electron beam tube
[NASA-CASE-NPO-10625] c09 N71-26182
- TWISTING**
- Means for controlling aerodynamically induced twist --- equipment to control twisting of slender wings due to aerodynamic loads
[NASA-CASE-LAR-12175-1] c05 N80-16055
- TWO BODY PROBLEM**
- Instrument for measuring potentials on two dimensional electric field plot
[NASA-CASE-XLA-08493] c10 N71-19421
- TWO DIMENSIONAL BODIES**
- Two-dimensional radiant energy array computers and computing devices
[NASA-CASE-GSC-11839-1] c60 N77-14751

TWO PHASE FLOW

- Solenoid two-step valve for bipropellant flow rate control to rocket engine
[NASA-CASE-XMS-04890-1] c15 N7C-22192
- Two phase fluid pressurization system for propellant tank
[NASA-CASE-HSC-12390] c27 N71-29155
- Two-phase flow system with discrete, impinging two-phase jets
[NASA-CASE-NPO-11556] c12 N72-25292
- Method and turbine for extracting kinetic energy from a stream of two-phase fluid
[NASA-CASE-NPO-14130-1] c34 N75-20335
- Improved method for driving two-phase turbines with enhanced efficiency
[NASA-CASE-NPO-15037-1] c37 N80-26660
- TWO STAGE TURBINES**
Improved method for driving two-phase turbines with enhanced efficiency
[NASA-CASE-NPO-15037-1] c37 N80-26660
- TYPEWRITERS**
Guide for a typewriter
[NASA-CASE-HFS-15218-1] c37 N77-19457

U

U BENDS

- Elbow forming in jacketed pipes while maintaining separation between core shape and jacket pipes
[NASA-CASE-XNP-10475] c15 N71-24679
- U shaped heated tube for distillation and purification of liquid metals
[NASA-CASE-XNP-08124-2] c06 N73-13129

ULCERS

- Indomethacin-antihistamine combination for gastric ulceration control
[NASA-CASE-ARC-11118-2] c52 N81-14613
- Indomethacin-antihistamine combination for gastric ulceration control
[NASA-CASE-ARC-11118-1] c52 N81-29764

ULLAGE

- Radiation source and detection system for measuring amount of liquid inside tanks independently of liquid configuration
[NASA-CASE-HSC-12280] c27 N71-16348

ULTRAHIGH FREQUENCIES

- Turnstile and flared cone UHF antenna
[NASA-CASE-LAR-10970-1] c33 N76-14372
- Dual band combiner for horn antenna
[NASA-CASE-NPO-14519-1] c32 N80-23524

ULTRAHIGH VACUUM

- Solid lubricant applied to porous roller bearings prior to use in ultrahigh vacuum
[NASA-CASE-XLE-09527] c15 N71-17688
- Calibration of vacuum gauges for measuring total and partial pressures in ultrahigh vacuum region
[NASA-CASE-XGS-07752] c14 N73-30390
- Ultrahigh vacuum gauge with two collector electrodes
[NASA-CASE-LAR-02743] c14 N73-32324
- In situ transfer standard for ultrahigh vacuum gage calibration
[NASA-CASE-LAR-10862-1] c35 N74-15092

ULTRASONIC AGITATION

- Development of ultrasonic radiation equipment for removing material from host surface and vacuum apparatus for recovery of material
[NASA-CASE-NPO-11213] c15 N73-20514

ULTRASONIC CLEANING

- Acoustic tooth cleaner
[NASA-CASE-LAR-12471-1] c52 N81-12724

ULTRASONIC FLAW DETECTION

- Length mode piezoelectric ultrasonic transducer for inspection of solid objects
[NASA-CASE-HSC-19672-1] c38 N79-14398

ULTRASONIC RADIATION

- Ultrasonic biomedical measuring and recording apparatus --- for recording motion of internal organs such as heart valves
[NASA-CASE-ARC-10597-1] c52 N74-20726
- Biomedical ultrasonoscope
[NASA-CASE-ARC-10994-1] c52 N76-33835
- Biomedical ultrasonoscope
[NASA-CASE-ARC-10994-2] c52 N79-26771

ULTRASONIC TESTS

- Ultrasonic scanner for radial and flat panels
[NASA-CASE-HFS-20335-1] c35 N74-10415

- Ultrasonic scanning system for in-place inspection of brazed tube joints
[NASA-CASE-HFS-20767-1] c38 N74-15130
- Method and apparatus for nondestructive testing --- using high frequency arc discharges
[NASA-CASE-HFS-21233-1] c38 N74-15395
- CW ultrasonic bolt tensioning monitor
[NASA-CASE-LAR-12016-1] c39 N78-15512
- ULTRASONIC WAVE TRANSDUCERS**
Development of ultrasonic radiation equipment for removing material from host surface and vacuum apparatus for recovery of material
[NASA-CASE-NPO-11213] c15 N73-20514
- Ultrasonic bone densitometer
[NASA-CASE-HFS-20994-1] c35 N75-12271
- Reference apparatus for medical ultrasonic transducer
[NASA-CASE-ARC-10753-1] c54 N75-27760
- Ultrasonic calibration device --- for producing changes in acoustic attenuation and phase velocity
[NASA-CASE-LAR-11435-1] c35 N76-15432
- Coupling apparatus for ultrasonic medical diagnostic system
[NASA-CASE-NPO-13935-1] c52 N79-14751
- Liquid-immersible electrostatic ultrasonic transducer
[NASA-CASE-LAR-12465-1] c35 N80-18363
- CDS solid state phase insensitive ultrasonic transducer --- annealing cadmium sulfide crystals
[NASA-CASE-LAR-12304-1] c35 N80-20559
- ULTRASONIC WELDING**
Ultrasonically bonded valve assembly
[NASA-CASE-NPO-13360-1] c37 N75-25185
- ULTRASONICS**
Ultrasonic wrench for applying vibratory energy to mechanical fasteners
[NASA-CASE-HFS-20586] c15 N71-17686
- Pseudo continuous wave instrument --- ultrasonics
[NASA-CASE-LAR-12260-1] c35 N79-10390
- ULTRAVIOLET FILTERS**
Ultraviolet filter of thorium fluoride and cryolite on quartz base
[NASA-CASE-XNP-02340] c23 N69-24332
- Development of ultraviolet resonance lamp with improved transmission of radiation
[NASA-CASE-ARC-10030] c09 N71-12521
- ULTRAVIOLET LASERS**
Stabilization of He2(a 3 Sigma u+ molecules in liquid helium by optical pumping for vacuum UV laser 6
[NASA-CASE-NPO-13993-1] c72 N79-13826
- ULTRAVIOLET RADIATION**
Ultraviolet radiation resistant alkali-metal silicate coatings for temperature control of spacecraft
[NASA-CASE-XGS-04119] c18 N69-39979
- Development of ultraviolet resonance lamp with improved transmission of radiation
[NASA-CASE-ARC-10030] c09 N71-12521
- Gas leak detection in evacuated systems using ultraviolet radiation probe
[NASA-CASE-ERC-10034] c15 N71-24896
- Phototropic composition of matter with sensitivity to ultraviolet light and usable for producing positive photographic images
[NASA-CASE-XGS-03736] c14 N72-22443
- Transmitting and reflecting diffuser --- for ultraviolet light
[NASA-CASE-LAR-10385-2] c70 N74-13436
- Ultraviolet and thermally stable polymer compositions
[NASA-CASE-ARC-10592-1] c27 N74-21156
- Light shield and cooling apparatus --- high intensity ultraviolet lamp
[NASA-CASE-LAR-10089-1] c34 N74-23066
- Plane detector operable in presence of proton radiation
[NASA-CASE-HFS-21577-1] c19 N74-29410
- Method and apparatus for generating coherent radiation in the ultra-violet region and above by use of distributed feedback
[NASA-CASE-NPO-13346-1] c36 N76-29575
- Ultraviolet and thermally stable polymer compositions
[NASA-CASE-ARC-10592-2] c27 N76-32315
- Vita-violet process for producing flame resistant polyamides and products produced

- thereby --- protective clothing for high oxygen environments
[NASA-CASE-MSC-16074-1] c27 N80-26446
- ULTRAVIOLET REFLECTION**
Composition and production method of alkali metal silicate paint with ultraviolet reflection properties
[NASA-CASE-XGS-04799] c18 N71-24183
Ultraviolet light reflective coating
[NASA-CASE-GSC-11786-1] c24 N76-24363
Transmitting and reflecting diffuser --- using ultraviolet grade fused silica coatings
[NASA-CASE-LAR-10385-3] c74 N78-15E79
- ULTRAVIOLET SPECTRA**
Ultraviolet chromatographic detector for quantitative and qualitative analysis of compounds
[NASA-CASE-HQN-10756-1] c14 N72-25428
- ULTRAVIOLET SPECTROMETERS**
Concave grating spectrometer for use in near and vacuum ultraviolet regions
[NASA-CASE-XGS-01036] c14 N70-40C03
Telespectrograph for analyzing upper atmosphere by tracking bodies reentering atmosphere at high velocities
[NASA-CASE-XLA-03273] c14 N71-18699
- UMBILICAL CONNECTORS**
Umbilical separator for rockets
[NASA-CASE-XNP-00425] c11 N70-38202
Remotely actuated quick disconnect mechanism for umbilical cables
[NASA-CASE-XLA-00711] c03 N71-12258
Remotely actuated quick disconnect for tubular umbilical conduits used to transfer fluids from ground to rocket vehicle
[NASA-CASE-XLA-01396] c03 N71-12259
Internal and external serpentine devices for performing physical operations around orbital space stations
[NASA-CASE-XNP-05344] c31 N71-16345
Breakaway multiwire electrical cable connector with particular application for umbilical type cables
[NASA-CASE-NPO-11140] c15 N72-17455
Gas operated quick disconnect coupling for umbilical connectors
[NASA-CASE-NPO-11202] c15 N72-25450
Deployable flexible tunnel
[NASA-CASE-MFS-22636-1] c37 N76-22540
- UMBILICAL TOWERS**
Emergency escape cabin system for launch towers
[NASA-CASE-XKS-02342] c05 N71-11199
- UNDERWATER ENGINEERING**
Ejectable underwater sound source recovery assembly
[NASA-CASE-LAR-10595-1] c35 N74-16135
Underwater seismic source --- for petroleum exploration
[NASA-CASE-NPO-14255-1] c46 N79-23555
- UNDERWATER TESTS**
Pressure regulator for space suit worn underwater to simulate space environment for testing and experimentation
[NASA-CASE-MFS-20332] c05 N72-20097
Underwater space suit pressure control regulator
[NASA-CASE-MFS-20332-2] c05 N73-25125
- UNIFORM FLOW**
Wind tunnel flow generation section
[NASA-CASE-ABC-10710-1] c09 N75-12969
- UNIONS (CONNECTORS)**
Beam connector apparatus and assembly
[NASA-CASE-MFS-25134-1] c31 N81-12283
Universal connectors for joining stringers
[NASA-CASE-LAR-12744-1] c37 N81-31551
- UNLOADING**
Bootstrap unloading circuits for sampling transducer voltage sources without drawing current
[NASA-CASE-XNP-09768] c09 N71-12516
- UNMANNED SPACECRAFT**
Device which separates and screens particles of soil samples for vidicon viewing in vacuum and reduced gravity environments
[NASA-CASE-XNP-09770-3] c11 N71-27036
- UP-CONVERTERS**
Method and apparatus for quadriphase-shift-key and linear phase modulation
[NASA-CASE-NPO-14444-1] c33 N81-15192
- UPPER ATMOSPHERE**
Telespectrograph for analyzing upper atmosphere by tracking bodies reentering atmosphere at high velocities
[NASA-CASE-XLA-03273] c14 N71-18699
Development and operation of apparatus for sampling particulates in gases in upper atmosphere
[NASA-CASE-HQN-10037-1] c14 N73-27376
Rocket having barium release system to create ion clouds in the upper atmosphere
[NASA-CASE-LAR-10670-2] c15 N74-27360
Microwave limb sounder --- to measure trace gases in the upper atmosphere
[NASA-CASE-NPO-14544-1] c74 N79-34014
- URANIUM 235**
Isotope separation using metallic vapor lasers
[NASA-CASE-NFO-13550-1] c36 N77-26477
- UREAS**
Aldehyde-containing urea-absorbing polysaccharides
[NASA-CASE-NFO-13620-1] c27 N77-30236
Dialysis system --- using ion exchange resin membranes permeable to urea molecules
[NASA-CASE-NFO-14101-1] c52 N80-14687
Reverse osmosis membrane of high urea rejection properties --- water purification
[NASA-CASE-ARC-10980-1] c27 N80-23452
- URETHANES**
Viscoelastic cationic polymers containing the urethane linkage
[NASA-CASE-NFO-10830-1] c27 N81-15104
- URINALYSIS**
Automated fluid chemical analyzer for microchemical analysis of small quantities of liquids by use of selected reagents and analyzer units
[NASA-CASE-XNP-09451] c06 N71-26754
Enzymatic luminescent bioassay method for determining bacterial levels in urine
[NASA-CASE-GSC-11092-2] c04 N73-27052
Automatic device for assaying urine on bacterial adenine triphosphate content
[NASA-CASE-GSC-11169-2] c05 N73-32011
Determination of antimicrobial susceptibilities on infected urines without isolation
[NASA-CASE-GSC-12046-1] c52 N79-14750
- URINATION**
Open type urine receptacle with tubular housing
[NASA-CASE-MSC-12324-1] c05 N72-22093
Urine collection device
[NASA-CASE-MSC-16433-1] c52 N81-24711
Urine collection apparatus --- feminine hygiene
[NASA-CASE-MSC-18381-1] c52 N81-28740
- URINE**
Urine collection device
[NASA-CASE-MSC-16433-1] c52 N78-27750
- UROLOGY**
Urine collection device
[NASA-CASE-MSC-16433-1] c52 N81-24711
- UTERUS**
A cervix-to-rectum measuring device in a radiation applicator for use in the treatment of cervical cancer
[NASA-CASE-GSC-12081-2] c52 N77-26796

V

- V GROOVES**
Vee-notching device --- with adjustable carriage
[NASA-CASE-MFS-20730-1] c39 N74-13131
Complementary DMOS-V MOS integrated circuit structure
[NASA-CASE-GSC-12190-1] c33 N79-12321
Rotary target V-block --- aligning wind tunnel apparatus for optical measurement
[NASA-CASE-LAR-12007-2] c74 N79-25876
- VACANCIES (CRYSTAL DEFECTS)**
Bimetallic junctions
[NASA-CASE-LEN-11573-1] c26 N77-28265
- VACUUM**
Hole mobility of deposited semiconductor films in vacuum utilizing thermal gradient
[NASA-CASE-XKS-04614] c15 N69-21460
Operating properties of superconducting magnet in vacuum environment
[NASA-CASE-XNP-06503] c23 N71-29049
Thermocouples of molybdenum and iridium alloys for more stable vacuum-high temperature performance

- [NASA-CASE-LEW-12174-2] c35 N79-14346
 Bakeable McLeod gauge
 [NASA-CASE-XGS-01293-1] c35 N79-33450
- VACUUM APPARATUS**
 Null-type vacuum microbalance for measuring minute mechanical displacements
 [NASA-CASE-XAC-00472] c15 N70-40180
 Sealing evacuation port and evacuating vacuum container such as space jackets
 [NASA-CASE-XMF-03290] c15 N71-23256
 Apparatus for determining volatile condensable material present in polymeric products
 [NASA-CASE-XNP-09699] c06 N71-24607
 Oil trap for preventing diffusion pump backstreaming into evacuated system
 [NASA-CASE-GSC-10518-1] c15 N72-22489
 Inductance device with vacuum insulation and materials of low gas entrapping capability
 [NASA-CASE-LEW-10330-1] c09 N72-27226
 Development of apparatus for producing metal powder particles of controlled size
 [NASA-CASE-XLE-06461-2] c17 N72-28535
 Portable vacuum probe surface sampler for sampling large surface areas with relatively light loading densities of microorganisms
 [NASA-CASE-LAR-10623-1] c14 N73-30395
 Vacuum leak detector
 [NASA-CASE-LAR-11237-1] c35 N75-19612
 Apparatus for positioning modular components on a vertical or overhead surface
 [NASA-CASE-LAR-11465-1] c37 N76-21554
 Safety shield for vacuum/pressure chamber viewing port
 [NASA-CASE-GSC-12513-1] c31 N81-19343
 Method and apparatus for supercooling and solidifying substances --- containless melts and space processing
 [NASA-CASE-MFS-25242-1] c35 N81-24413
 Head for high speed spinner having a vacuum chuck --- holding silicon dioxide chips for etching
 [NASA-CASE-NPO-15227-1] c37 N81-33482
- VACUUM CHAMBERS**
 High-vacuum condenser tank for testing ion rocket engines
 [NASA-CASE-XLE-00168] c11 N70-33278
 Portable electron beam welding chamber
 [NASA-CASE-LEW-11531] c15 N71-14932
 Space environmental work simulator with portions of space suit mounted to vacuum chamber wall
 [NASA-CASE-XMF-07488] c11 N71-18773
 Ionization control system design for monitoring separately located ion gage pressures on vacuum chambers
 [NASA-CASE-XLE-00787] c14 N71-21090
 Coherent light beam device and method for measuring gas density in vacuum chambers
 [NASA-CASE-XER-11203] c14 N71-28994
 Transferring liquid nitrogen through vacuum chamber to cryopanel
 [NASA-CASE-LAR-10031] c15 N72-22484
 Vacuum chamber with scale model of rocket engine base area of space vehicle
 [NASA-CASE-MFS-20620] c11 N72-27262
 Packless valve for use with evacuation chamber with adapter for attachment to vacuum line and vacuum pump
 [NASA-CASE-LAR-10061-1] c15 N72-31483
 Apparatus for analyzing gas samples in containers including vacuum chamber, mass spectrometer, and gas chromatography
 [NASA-CASE-GSC-10903-1] c14 N73-12444
 Design and development of test stand system for supporting test items in vacuum chamber
 [NASA-CASE-MFS-21362] c11 N73-20267
 Atomic hydrogen storage --- cryotrapping and magnetic field strength
 [NASA-CASE-LEW-12081-2] c28 N80-20402
 Containerless high temperature calorimeter apparatus
 [NASA-CASE-MFS-23923-1] c35 N81-19426
- VACUUM DEPOSITION**
 Deposition method for epitaxial beta SiC films having high degree of crystallographic perfection
 [NASA-CASE-ERC-10120] c26 N69-33482
 Describing apparatus used in vacuum deposition of thin film inductive windings for spacecraft microcircuitry
 [NASA-CASE-XMF-01667] c15 N71-17647
- Spatter proof evaporant source design for use in vacuum deposition of solid thin films on substrates
 [NASA-CASE-XMF-06065] c15 N71-20395
 Device for high vacuum film deposition with electromagnetic ion steering
 [NASA-CASE-NFO-10331] c09 N71-26701
 Preparation of dielectric coating of variable dielectric constant by plasma polymerization
 [NASA-CASE-ARC-10892-2] c27 N79-14214
- VACUUM EFFECTS**
 High power RF coaxial switch
 [NASA-CASE-NFO-14229-1] c33 N80-18285
- VACUUM FURNACES**
 Apparatus for inserting and removing specimens from high temperature vacuum furnaces
 [NASA-CASE-LAR-10841-1] c31 N74-27900
- VACUUM GAGES**
 Simulating operation of thermopile vacuum gage tube at high and low pressures
 [NASA-CASE-XLA-02758] c14 N71-18481
 Calibration of vacuum gauges for measuring total and partial pressures in ultrahigh vacuum region
 [NASA-CASE-XGS-07752] c14 N73-30390
 Ionization gage for measuring ultrahigh vacuum levels
 [NASA-CASE-XLA-05087] c14 N73-30391
 In situ transfer standard for ultrahigh vacuum gage calibration
 [NASA-CASE-LAR-10862-1] c35 N74-15092
- VACUUM MELTING**
 Electric furnace for vacuum and zero gravity melting of high melting point materials during earth orbit
 [NASA-CASE-MFS-20710] c11 N72-23215
- VACUUM PUMPS**
 Pressure control valve --- inflating flexible bladders
 [NASA-CASE-ARC-11251-1] c37 N81-17433
- VACUUM SYSTEMS**
 Shrink-fit vacuum system gas valve
 [NASA-CASE-XGS-00587] c15 N70-35087
 Leakproof soft metal seal for use in very high vacuum systems operating at cryogenic temperatures
 [NASA-CASE-XGS-02441] c15 N70-41629
 Describing hot filament type Bayard-Alpert ionization gage with ion collector buried or removed from grid structure
 [NASA-CASE-XLA-07424] c14 N71-18482
 Describing sorption vacuum trap having housing with group of reentrant wall portions projecting into internal gas-pervious container filled with gas and vapor sorbent material
 [NASA-CASE-XER-09519] c14 N71-18483
 Vacuum leak detector
 [NASA-CASE-LAR-11237-1] c35 N75-19612
- VACUUM TUBES**
 Integrated structure vacuum tube
 [NASA-CASE-ARC-10445-1] c31 N76-31365
 Method of purifying metallurgical grade silicon employing reduced pressure atmospheric control
 [NASA-CASE-NPO-14474-1] c26 N80-14229
- VALUE**
 High impact pressure regulator having minimum number of lightweight movable elements
 [NASA-CASE-NFO-10175] c14 N71-18625
- VALVES**
 Actuator using compressed gas as driving force to control valve handling large liquid flows
 [NASA-CASE-XHQ-01208] c15 N70-35409
 Two component valve assembly for cryogenic liquid transfer regulation
 [NASA-CASE-XLE-00397] c15 N70-36492
 High pressure four-way valve with O ring adapted to pass across inlet port
 [NASA-CASE-XNP-00214] c15 N70-36908
 Reinforcing beam system for highly flexible diaphragms in valves or pressure switches
 [NASA-CASE-XNP-01962] c32 N70-41370
 Multiple vortex amplifier system as fluid valve
 [NASA-CASE-XMF-04709] c15 N71-15609
 Throttle valve for regulating fluid flow volume
 [NASA-CASE-XNP-09698] c15 N71-18580
 Development and characteristics of high pressure control valve
 [NASA-CASE-MSC-11010] c15 N71-19435

- Valve seat with resilient support ring for venting valves subjected to high pressure sealing loads
[NASA-CASE-XKS-02582] c15 N71-21234
- Positive locking check valve for stopping reversed flow
[NASA-CASE-XMS-09310] c15 N71-22706
- Valve assembly for controlling simultaneously more than one fluid flow, and having stable qualities under loads
[NASA-CASE-XMS-05890] c09 N71-23191
- Segmented sealing surface in valve seat
[NASA-CASE-NPO-10606] c15 N72-25451
- Packless valve for use with evacuation chamber with adapter for attachment to vacuum line and vacuum pump
[NASA-CASE-LAR-10061-1] c15 N72-31483
- Flow control valve --- for high temperature fluids
[NASA-CASE-NPO-11951-1] c37 N74-21065
- Airlock
[NASA-CASE-MPS-20922-1] c18 N74-22136
- Reciprocating engines
[NASA-CASE-MSC-16239-1] c37 N81-32510
- VANES**
Design and characteristics of device for sensing solar radiation and providing spacecraft attitude control to maintain direction with respect to incident radiation
[NASA-CASE-XNP-05535] c14 N71-23040
- Rotary vane attenuator with two stators and intermediary rotor, using resistive and orthogonally disposed cards
[NASA-CASE-NPO-11418-1] c14 N73-13420
- VAPOR DEPOSITION**
Deposition method for epitaxial beta SiC films having high degree of crystallographic perfection
[NASA-CASE-ERC-10120] c26 N69-33482
- Device for producing high purity silicon carbide on carbon base by hydrogen reduction of silicon tetrachloride
[NASA-CASE-XLA-02057] c26 N70-40015
- Water content in vapor deposition atmosphere for forming n-type and p-type junctions of zinc doped gallium arsenide
[NASA-CASE-XNP-01961] c26 N71-29156
- Vapor deposition method for forming metallized tungsten contacts on silicon substrates
[NASA-CASE-GSC-10695-1] c09 N72-25259
- Means of vapor deposition using electric current and evaporator filament
[NASA-CASE-LAR-10541-1] c15 N72-32487
- Deposition of alloy films --- on irregularly shaped metal object
[NASA-CASE-LEW-11262-1] c27 N74-13270
- System for depositing thin films
[NASA-CASE-MPS-20775-1] c31 N75-12161
- Vapor deposition apparatus --- semiconductors and gallium arsenides
[NASA-CASE-HQN-10462] c25 N75-29192
- Chemical vapor deposition reactor --- providing uniform film thickness
[NASA-CASE-NPO-13650-1] c25 N79-28253
- VAPOR PHASES**
Method and feed system for separating and orienting liquid and vapor phases of liquid propellants in zero gravity environment
[NASA-CASE-XLE-01182] c27 N71-15635
- Gallium arsenide solar cell preparation by surface deposition of cuprous iodide on thin n-type polycrystalline layers and heating in iodine vapor
[NASA-CASE-XNP-01960] c09 N71-23027
- Mixed liquid and vapor phase analyzer design with thermocouples for relative heat transfer measurement
[NASA-CASE-NPO-10691] c14 N71-26199
- Electronic recording system for spatial mass distribution of liquid rocket propellant droplets or vapors ejected from high velocity nozzles
[NASA-CASE-NPO-10185] c10 N71-26339
- VAPOR PRESSURE**
Fuel tank pressure-relief device for venting cryogenic liquid vapors through tubes with porous plug
[NASA-CASE-XLE-00288] c15 N70-34247
- Vapor-liquid separator design with vapor driven pump for separated liquid pumping for application in propellant transfer
[NASA-CASE-XNP-04042] c15 N71-23023
- Method and apparatus for convection control of metallic halide vapor density in a metallic halide laser
[NASA-CASE-NPO-15021-1] c36 N80-20574
- VAPOR TRAPS**
Describing sorption vacuum trap having housing with group of reentrant wall portions projecting into internal gas-pervious container filled with gas and vapor sorbent material
[NASA-CASE-XER-09519] c14 N71-18483
- VAPORIZERS**
Vapor generating boiler system for turbine motor
[NASA-CASE-XLE-00785] c33 N71-16104
- Potential heat exchange fluids for use in sulfuric acid vaporizers
[NASA-CASE-NPO-15015-1] c25 N80-23394
- VAPORIZING**
Apparatus and process for volumetrically dispensing reagent quantities of volatile chemicals for small batch reactions
[NASA-CASE-NPO-10070] c15 N71-27372
- Development of method for controlling vapor content of gas
[NASA-CASE-NPO-10633] c03 N72-28025
- VARIABLE DIODE CIRCUITS**
Phase modulator with tuned variable length electrical lines including coupling and varactor diode circuits
[NASA-CASE-MSC-13201-1] c07 N71-28429
- VARIABLE DIODES**
Varactor microwave frequency mixing circuit
[NASA-CASE-XGS-02171] c09 N69-24324
- Multiple varactor for generating high frequencies with high power and high conversion efficiency
[NASA-CASE-XNP-04958-1] c10 N71-26414
- Millimeter wave pumped parametric amplifier
[NASA-CASE-GSC-11617-1] c33 N74-32660
- VARIABLE CYCLE ENGINES**
Dual cycle aircraft turbine engine
[NASA-CASE-LAR-11310-1] c07 N77-28118
- Variable cycle gas turbine engines
[NASA-CASE-LEW-12916-1] c37 N78-17384
- Variable mixer propulsion cycle
[NASA-CASE-LEW-12917-1] c07 N78-18067
- VARIABLE GEOMETRY STRUCTURES**
Aerospace configuration with low and high aspect ratio variability for high and low speed flight
[NASA-CASE-XLA-00142] c02 N70-33286
- Variable geometry wind tunnel for testing aircraft models at subsonic speeds
[NASA-CASE-XLA-07430] c11 N72-22246
- Aircraft engine nozzle
[NASA-CASE-ARC-10977-1] c07 N80-32392
- VARIABLE PITCH PROPELLERS**
Dual output variable pitch turbofan actuation system
[NASA-CASE-LEW-12419-1] c07 N77-14025
- Impact absorbing blade mounts for variable pitch blades
[NASA-CASE-LEW-12313-1] c37 N78-10468
- VARIABLE SWEEP WINGS**
Variable sweep wing configuration for supersonic aircraft
[NASA-CASE-XLA-00230] c02 N70-33255
- Variable aspect ratio and variable sweep delta wing planforms for supersonic aircraft
[NASA-CASE-XLA-00221] c02 N70-33266
- Supersonic aircraft configuration providing for variable aspect ratio and variable sweep wings
[NASA-CASE-XLA-00166] c02 N70-34178
- Supersonic aircraft variable sweep wing planform for varying aspect ratio
[NASA-CASE-XLA-00350] c02 N70-38011
- Development and characteristics of variable sweep wing control system for supersonic aircraft
[NASA-CASE-XLA-03659] c02 N71-11041
- Design of dual fuselage aircraft with pivoting wing and horizontal stabilizer to permit yawing of wing in flight for high speed operation
[NASA-CASE-ARC-10470-1] c02 N73-26005
- VARIABLE THRUST**
Variable thrust ion engine using thermal decomposition of solid cesium compound to

- produce propulsive vapor
[NASA-CASE-XMF-00923] c28 N70-36802
- Continuous variation of propellant flow and thrust by application of liquid foam flow theory to injection orifice
[NASA-CASE-XLE-00177] c28 N70-40367
- Variable thrust nozzle for quiet turbofan engine and method of operating same
[NASA-CASE-LEW-12317-1] c07 N78-17055
- VARIATIONS**
- Gearing system for eliminating backlash and filtering input torque fluctuations from high inertia load
[NASA-CASE-XGS-04227] c15 N71-21744
- VECTOR ANALYSIS**
- Development of two force component measuring device
[NASA-CASE-XAC-04886-1] c14 N71-20439
- VECTOCARDIOGRAPHY**
- Electromedical garment, applying vectocardioelectric type electrodes to human torsos for data recording during physical activity
[NASA-CASE-XFR-10856] c05 N71-11189
- VEGETATION GROWTH**
- Rotary plant growth accelerating apparatus --- weightlessness
[NASA-CASE-ARC-10722-1] c51 N75-25503
- Remote sensing of vegetation and soil using microwave ellipsometry
[NASA-CASE-GSC-11976-1] c43 N78-10529
- Enhancement of in vitro Guayule propagation
[NASA-CASE-NPO-15213-1] c51 N81-29728
- VEHICLE WHEELS**
- Resilient vehicle wheel for lunar surface travel
[NASA-CASE-MFS-20400] c31 N71-18611
- Resilient wheel design with woven wire tire and abrasive treads for lunar surface vehicles
[NASA-CASE-MFS-13929] c15 N71-27091
- Omnidirectional wheel
[NASA-CASE-MFS-21309-1] c37 N74-18125
- Two speed drive system --- mechanical device for changing speed on rotating vehicle wheel
[NASA-CASE-MFS-20645-1] c37 N74-23070
- Fifth wheel
[NASA-CASE-FRC-10081-1] c37 N77-14477
- Improved tire/wheel concept --- pneumatic aircraft tire
[NASA-CASE-LAR-11695-2] c37 N80-18402
- Tire/wheel concept
[NASA-CASE-LAR-11695-2] c37 N81-24443
- VEHICLES**
- Magnetic suspension and pointing system
[NASA-CASE-LAR-11889-2] c37 N78-27424
- VEHICULAR TRACKS**
- An improved suspension system for a wheel rolling on a flat track --- bearings for directional antennas
[NASA-CASE-NPO-14395-1] c37 N79-12446
- VELOCITY**
- Velocity limiting safety system for motor driven research vehicle
[NASA-CASE-XLA-07473] c15 N71-24895
- VELOCITY MEASUREMENT**
- Particle detector for measuring micrometeoroid velocity in space
[NASA-CASE-XLA-00495] c14 N70-41332
- Superconductive accelerometer employing variable force principle to determine acceleration of bodies
[NASA-CASE-XMF-01099] c14 N71-15969
- Device for determining acceleration of gravity by interferometric measurement of travel of falling body
[NASA-CASE-XMF-05844] c14 N71-17587
- Describing laser Doppler velocimeter for measuring mean velocity and turbulence of fluid flow
[NASA-CASE-MFS-20386] c21 N71-19212
- Momentum-velocity analyzer for measuring minute space particles
[NASA-CASE-XMS-04201] c14 N71-22990
- Development of combined velocimeter and accelerometer based on color changes in liquid crystalline material subjected to shear stresses
[NASA-CASE-ERC-10292] c14 N72-25410
- Instrument for measuring magnitude and direction of flow velocity in flow field
[NASA-CASE-LAR-10855-1] c14 N73-13415
- Doppler shift system --- system for measuring velocities of radiating particles
[NASA-CASE-HQN-10740-1] c72 N74-19310
- Tachometer
[NASA-CASE-MFS-23175-1] c35 N77-30436
- Velocity measurement system
[NASA-CASE-MFS-23363-1] c35 N78-32396
- Fluid velocity measuring device
[NASA-CASE-LAR-11729-1] c34 N79-12359
- Air speed and attitude probe
[NASA-CASE-FRC-11009-1] c06 N80-18036
- VELOCITY MODULATION**
- Selector mechanism for mechanical separation and discrimination of high velocity molecular particles
[NASA-CASE-XLE-01533] c11 N71-10777
- Describing device for velocity control of electromechanical drive mechanism of scanning mirror of interferometer
[NASA-CASE-IGS-03532] c14 N71-17627
- Coupled cavity traveling wave tube with velocity tapering
[NASA-CASE-LEW-12296-1] c33 N80-19425
- VENTILATION**
- Protective garment ventilation system
[NASA-CASE-XMS-04928] c54 N78-17679
- VENTILATORS**
- Heat sterilizable patient ventilator
[NASA-CASE-NPO-13313-1] c54 N75-27761
- VENTING**
- Fuel tank pressure-relief device for venting cryogenic liquid vapors through tubes with porous plug
[NASA-CASE-XLE-00288] c15 N70-34247
- Venting device for liquid propellant storage tank using magnetic field to separate liquid and gaseous phases
[NASA-CASE-XLE-01449] c15 N70-41646
- Valve seat with resilient support ring for venting valves subjected to high pressure sealing loads
[NASA-CASE-XKS-02582] c15 N71-21234
- Venting device for pressurized space suit helmet to eliminate vomit expelled by crewmen
[NASA-CASE-IMS-09652-1] c05 N71-26333
- Solid propellant rocket engine with venting system to control effective nozzle throat area
[NASA-CASE-XNP-03282] c28 N72-20758
- VENUS (PLANET)**
- Space simulator with uniform test region radiation distribution, adapted to simulate Venus solar radiations
[NASA-CASE-XNP-00459] c11 N70-38675
- VERTICAL FLIGHT**
- Aircraft indicator for pilot control of takeoff roll, climbout path and verticle flight path in poor visibility conditions
[NASA-CASE-XLA-00487] c14 N70-40157
- VERTICAL LANDING**
- Vertically descending flight vehicle landing gear for rough terrain
[NASA-CASE-XMF-01174] c02 N70-41589
- VERTICAL TAKEOFF AIRCRAFT**
- Mechanical stabilization system for VTOL aircraft
[NASA-CASE-XLA-06339] c02 N71-13422
- Development of attitude control system for vertical takeoff aircraft using reaction nozzles displaced from various axes of aircraft
[NASA-CASE-XAC-08972] c02 N71-20570
- VERY HIGH FREQUENCIES**
- VHF/UHF parasitic probe antenna for spacecraft communication
[NASA-CASE-XKS-09340] c07 N71-24614
- VERY LONG BASE INTERFEROMETRY**
- System for real-time crustal deformation monitoring
[NASA-CASE-NPO-14124-1] c46 N80-14603
- VESTS**
- Lightweight life preserver without fastening devices
[NASA-CASE-XMS-00864] c05 N70-36493
- VIBRATION**
- Three stage motion restraining mechanism for restraining and damping three dimensional vibrational movement of gimballed package during launch of spacecraft
[NASA-CASE-GSC-10306-1] c15 N71-24694
- Vibration control of flexible bodies in steady accelerating environment

- [NASA-CASE-LAR-10106-1] c15 N71-27169
- VIBRATION DAMPING**
- Mercury filled pendulum damper for controlling bending vibration induced by wind effects
[NASA-CASE-LAR-10274-1] c14 N71-17626
- Digital filter for reducing jitter in digital control systems
[NASA-CASE-NPO-11088] c08 N71-29034
- Blade vibration damping pins for turbomachinery
[NASA-CASE-XLE-00155] c28 N71-29154
- Active notch filter network with variable notch depth, width and frequency
[NASA-CASE-PBC-11055-1] c33 N80-29583
- VIBRATION EFFECTS**
- Electromagnetic energy detection by thermal sensor with vibrating electrode
[NASA-CASE-XAC-10768] c09 N71-18830
- Development of ultrasonic radiation equipment for removing material from host surface and vacuum apparatus for recovery of material
[NASA-CASE-NPO-11213] c15 N73-20514
- Spherical bearing --- to reduce vibration effects
[NASA-CASE-MFS-23447-1] c37 N79-11404
- VIBRATION ISOLATORS**
- Shock and vibration damping device using temperature sensitive solid amorphous polymers
[NASA-CASE-XAC-11225] c14 N69-27486
- Miniature vibration isolator utilizing elastic tuning material
[NASA-CASE-XLA-01019] c15 N70-40156
- Vibration damping system operating in low vacuum environment for spacecraft mechanisms
[NASA-CASE-XMS-01620] c23 N71-15673
- Hermetically sealed vibration damper design for use in gimbal assembly of spacecraft inertial guidance system
[NASA-CASE-MSC-10959] c15 N71-26243
- Tuned damped vibration absorber for mass vibrating in more than one degree of freedom for use with wind tunnel models
[NASA-CASE-LAR-10083-1] c15 N71-27006
- Vibration isolation system, using coaxial helical compression springs
[NASA-CASE-NPO-11012] c15 N72-11391
- Thrust-isolating mounting --- characteristics of support for loads mounted in spacecraft
[NASA-CASE-MFS-21680-1] c18 N74-27397
- Shock absorbing mount for electrical components
[NASA-CASE-NPO-13253-1] c37 N75-18573
- Thermal insulation attaching means --- adhesive bonding of felt vibration insulators under ceramic tiles
[NASA-CASE-MSC-12619-2] c27 N79-12221
- Shock isolator for operating a diode laser on a closed-cycle refrigerator
[NASA-CASE-GSC-12297-1] c37 N79-28549
- Decoupler pylon: Wing/store flutter suppressor
[NASA-CASE-LAR-12468-1] c08 N80-22359
- VIBRATION MEASUREMENT**
- Development of system for measuring damping characteristics of structure or system subjected to random forces or influences
[NASA-CASE-ARC-10154-1] c14 N72-22440
- Method and apparatus for vibration analysis utilizing the Mossbauer effect
[NASA-CASE-XMF-05882] c35 N75-27329
- Displacement probes with self-contained exciting medium
[NASA-CASE-LAR-11690-1] c35 N80-14371
- Ride quality meter
[NASA-CASE-LAR-12882-1] c54 N81-31848
- VIBRATION METERS**
- Fiber optic transducers for monitoring and analysis of vibration in aerospace vehicles and onboard equipment
[NASA-CASE-XMF-02433] c14 N71-10616
- Ride quality meter
[NASA-CASE-LAR-12882-1] c54 N81-31848
- VIBRATION MODE**
- Function generators for producing complex vibration mode patterns used to identify vibration mode data
[NASA-CASE-LAR-10310-1] c10 N73-20253
- VIBRATION SIMULATORS**
- Equipment for vibration testing of assemblies, components, and other articles
[NASA-CASE-GSC-11302-1] c14 N73-13416
- VIBRATION TESTS**
- Electronic detection system for peak acceleration limits in vibrational testing of spacecraft components
[NASA-CASE-NPO-10556] c14 N71-27185
- Fixture for supporting articles during vibration tests comprising integral annular unit
[NASA-CASE-MFS-20523] c14 N72-27412
- Equipment for vibration testing of assemblies, components, and other articles
[NASA-CASE-GSC-11302-1] c14 N73-13416
- Multiaxes vibration device for making vibration tests along orthogonal axes of test specimen
[NASA-CASE-MFS-20242] c14 N73-19421
- Aeroelastic instability stoppers for wind-tunnel models
[NASA-CASE-LAR-12458-1] c09 N81-31230
- VIBRATIONAL SPECTRA**
- Tuned damped vibration absorber for mass vibrating in more than one degree of freedom for use with wind tunnel models
[NASA-CASE-LAR-10083-1] c15 N71-27006
- VIDEO COMMUNICATION**
- Circuitry for generating sync signals in PM communication systems including video information
[NASA-CASE-XNP-10830] c07 N71-11281
- Monitoring circuit design for sampling circuit control and reduction of time-bandwidth in video communication systems
[NASA-CASE-XNP-02791] c07 N71-23026
- Teletypewriter video communication system and apparatus
[NASA-CASE-XNP-06611] c07 N71-26102
- Sampling video compression system
[NASA-CASE-ARC-10984-1] c32 N77-24328
- VIDEO DATA**
- TV camera output signal control system for digital spacecraft communication
[NASA-CASE-XNP-01472] c14 N70-41807
- Transient video signal tape recorder with expanded playback
[NASA-CASE-ARC-10003-1] c09 N71-25866
- Restoration and improvement of demodulated facsimile video signals
[NASA-CASE-GSC-10185-1] c07 N72-12081
- Dual digital video switcher
[NASA-CASE-KSC-10782-1] c33 N75-30431
- Programmable scan/read circuitry for charge coupled device imaging detectors --- for a startracker
[NASA-CASE-NPO-15345-1] c33 N81-27403
- VIDEO EQUIPMENT**
- Video signal processing system for sampling video brightness levels
[NASA-CASE-NPO-10140] c07 N71-24742
- Video sync processor with phase locked system
[NASA-CASE-KSC-10002] c10 N71-25865
- Teletypewriter video communication system and apparatus
[NASA-CASE-XNP-06611] c07 N71-26102
- Video signal enhancement of signal component representing brightness of scene element in low contrast
[NASA-CASE-NPO-10343] c07 N71-27341
- Circuitry for high input impedance video processor with high noise immunity
[NASA-CASE-NPO-10199] c09 N72-17156
- Electronic video editor for switching video input signals to common output channel
[NASA-CASE-KSC-10003] c10 N73-13235
- Video tape recorder with scan conversion playback for color television signals
[NASA-CASE-NPO-10166-1] c07 N73-22076
- Scan converting video tape recorder
[NASA-CASE-NPO-10166-2] c35 N76-16391
- Stack plume visualization system
[NASA-CASE-LAR-11675-1] c45 N76-17656
- VIDICONS**
- Operation of vidicon tube for scanning spatial charge density pattern
[NASA-CASE-XNP-06028] c09 N71-23189
- Device which separates and screens particles of soil samples for vidicon viewing in vacuum and reduced gravity environments
[NASA-CASE-XNP-09770-3] c11 N71-27036
- VINYL POLYMERS**
- Method of producing output voltage from photovoltaic cell using poly-N-vinyl carbazole complexed with iodine
[NASA-CASE-NPO-10373] c03 N71-18698

Heat resistant polymers of oxidized styrylphosphine
[NASA-CASE-MSC-14903-1] c27 N78-32256
Compound oxidized styrylphosphine --- flame resistant vinyl polymers
[NASA-CASE-MSC-14903-2] c27 N80-10358
Heat resistant polymers of oxidized styrylphosphine
[NASA-CASE-MSC-14903-3] c27 N80-24438

VINYLIDENE
Preparation of dicyanoacetylene and vinylidene copolymers using organic compounds
[NASA-CASE-XNP-03250] c06 N71-23500

VIROSES
Water system virus detection
[NASA-CASE-MSC-16098-1] c51 N79-10693

VISCOELASTICITY
Automated ball rebound resilience test equipment for determining viscoelastic properties of polymers
[NASA-CASE-XLA-08254] c14 N71-26161
Development and characteristics of parallel plate viscometer for determination of absolute viscosity of liquids and viscoelastic materials
[NASA-CASE-NPO-11387] c14 N73-14429
Shock absorbing mount for electrical components
[NASA-CASE-NPO-13253-1] c37 N75-18573
Viscoelastic cationic polymers containing the urethane linkage
[NASA-CASE-NPO-10830-1] c27 N81-15104

VISCOMETERS
Describing instrument capable of measuring true shear viscosity of liquids and viscoelastic materials
[NASA-CASE-XNP-09462] c14 N71-17584
Development and characteristics of parallel plate viscometer for determination of absolute viscosity of liquids and viscoelastic materials
[NASA-CASE-NPO-11387] c14 N73-14429

VISCOSITY
Low density and low viscosity magnetic propellant for use under zero gravity conditions
[NASA-CASE-XLE-01512] c12 N70-40124
Viscosity measuring instrument
[NASA-CASE-NPO-14501-1] c35 N80-18357

VISCOUS DAMPING
Shock and vibration damping device using temperature sensitive solid amorphous polymers
[NASA-CASE-YAC-11225] c14 N69-27486
Design and operation of viscous pendulum damper
[NASA-CASE-XLA-02079] c12 N71-16894
Mercury filled pendulum damper for controlling bending vibration induced by wind effects
[NASA-CASE-LAR-10274-1] c14 N71-17626
Multiple plate hydrostatic viscous damper
[NASA-CASE-LEW-12445-1] c37 N81-22360

VISIBILITY
Controlled visibility device for simulating poor visibility conditions in training pilots in instrument landing and flight procedures
[NASA-CASE-YPR-04147] c11 N71-10748
High visibility air sea rescue panel
[NASA-CASE-MSC-12564-2] c03 N78-25070

VISORS
Anti-fog composition --- for prevention of fogging on surfaces such as space helmet visors and windshields
[NASA-CASE-MSC-13530-2] c23 N75-14834

VISUAL ACUITY
Multiparameter vision testing apparatus
[NASA-CASE-MSC-13601-2] c54 N75-27759

VISUAL CONTROL
Visual target luminaires for retrofire attitude control
[NASA-CASE-XMS-12158-1] c31 N69-27499

VISUAL FIELDS
Automated visual sensitivity tester for determining visual field sensitivity and blind spot size
[NASA-CASE-ARC-10329-1] c05 N73-26072
Visual examination apparatus
[US-PATENT-RE-28,921] c52 N76-30793
Binocular device for displaying numerical information in field of view
[NASA-CASE-LAR-11762-1] c74 N77-20882

VISUAL OBSERVATION
Automatic visual inspection system for microelectronics
[NASA-CASE-NPO-13282] c38 N78-17396

VISUAL PERCEPTION

high pressure liquid flow sight assembly for wide temperature range applications including cryogenic fluids
[NASA-CASE-XLE-02998] c14 N70-42074

VISUAL STIMULI
Reaction tester for testing reaction to light stimuli
[NASA-CASE-MSC-13604-1] c05 N73-13114

VOICE COMMUNICATION
Position locating system for remote aircraft using voice communication and digital signals
[NASA-CASE-GSC-10087-2] c21 N71-13958
Earth satellite relay station for frequency multiplexed voice transmission
[NASA-CASE-GSC-10118-1] c07 N71-24621
Voice operated receiving and transmitting system for use in protective suits
[NASA-CASE-KSC-10164] c07 N71-33108
Technique for recovery of voice data from heat damaged magnetic tape
[NASA-CASE-MSC-14219-1] c32 N74-27612
Filtering device --- removing electromagnetic noise from voice communication signals
[NASA-CASE-MFS-22729-1] c32 N76-21366
Real time analysis of voiced sounds
[NASA-CASE-NFO-13465-1] c32 N76-31372
Satellite personal communications system
[NASA-CASE-NFO-14480-1] c32 N80-20448

VOICE DATA PROCESSING
Digital communication system
[NASA-CASE-MSC-13912-1] c32 N74-30524
Memory-based frame synchronizer --- for voice data processing in digital communication systems
[NASA-CASE-GSC-12430-1] c32 N80-20453

VOLATILITY
Apparatus for determining volatile condensable material present in polymeric products
[NASA-CASE-XNP-09699] c06 N71-24607

VOLT-AMPERE CHARACTERISTICS
Simulating voltage-current characteristic curves of solar cell panel with different operational parameters
[NASA-CASE-XMS-01554] c10 N71-10578
The dc-to-dc converters employing staggered-phase power switches with two-loop control
[NASA-CASE-NPO-13512-1] c33 N77-10428
Apparatus including a plurality of spaced transformers for locating short circuits in cables
[NASA-CASE-KSC-10899-1] c33 N79-18193

VOLTAGE AMPLIFIERS
Increasing power conversion efficiency of electronic amplifiers by power supply switching
[NASA-CASE-XMS-00945] c09 N71-10798
Bootstrap unloading circuits for sampling transducer voltage sources without drawing current
[NASA-CASE-XNP-09768] c09 N71-12516
RC networks with voltage amplifier, RC input circuit, and positive feedback
[NASA-CASE-ARC-10020] c10 N72-17172
Wide range analog to digital converter with variable gain amplifier
[NASA-CASE-NFO-11018] c08 N72-21200
Voltage feed through apparatus having reduced partial discharge
[NASA-CASE-GSC-12347-1] c33 N80-18286

VOLTAGE CONVERTERS (DC TO DC)
Regulated dc-to-dc converter for voltage step-up or step-down with input-output isolation
[NASA-CASE-BQN-10792-1] c33 N74-11049
The dc-to-dc converters employing staggered-phase power switches with two-loop control
[NASA-CASE-NPO-13512-1] c33 N77-10428
Inrush current limiter
[NASA-CASE-GSC-11789-1] c33 N77-14333
Phase substitution of spare converter for a failed one of parallel phase staggered converters
[NASA-CASE-NPO-13812-1] c33 N77-30365
Regulated high efficiency, lightweight capacitor-diode multiplier dc to dc converter
[NASA-CASE-LEW-12791-1] c33 N78-32341
Power converter --- for display devices, lighting equipment
[NASA-CASE-FRC-11014-1] c33 N79-27395

- Buck/boost regulator
[NASA-CASE-GSC-12360-1] c33 N81-19392
- Elimination of current spikes in buck power converters
[NASA-CASE-NPO-14505-1] c33 N81-19393
- Push-pull converter with energy saving circuit for protecting switching transistors from peak power stress
[NASA-CASE-NPO-14316-1] c33 N81-33404
- VOLTAGE GENERATORS**
- Pulsed energy power system for application of combustible gases to turbine controlling ac voltage generator
[NASA-CASE-MSC-13112] c03 N71-11057
- Biotelemetry apparatus with dual voltage generators for implanting in animals
[NASA-CASE-XAC-05706] c05 N71-12342
- Transistorized circuit for producing multiple slope voltage sweep
[NASA-CASE-XMS-03542] c09 N71-28926
- Inductive-capacitive loops as load insensitive power converters
[NASA-CASE-ERC-10268] c09 N72-25252
- Pulse switching for high energy lasers
[NASA-CASE-NPO-14556-1] c36 N79-21336
- Driver for solar cell I-V characteristic plots
[NASA-CASE-NPO-14096-1] c44 N80-18551
- Adaptive reference voltage generator for firing angle control of line-commutated inverters
[NASA-CASE-MPS-25215-1] c33 N81-31481
- VOLTAGE REGULATORS**
- Regulated dc to dc converter
[NASA-CASE-XGS-03429] c03 N69-21330
- Power control switching circuit using low voltage semiconductor controlled rectifiers for high voltage isolation
[NASA-CASE-XNP-02713] c10 N69-39888
- Automatic measuring and recording of gain and zero drift characteristics of electronic amplifier
[NASA-CASE-XMS-05562-1] c09 N69-39586
- Automatic control of voltage supply to direct current motor
[NASA-CASE-XMS-04215-1] c09 N69-39587
- Design, development, and operating principles of power supply with starting circuit which is independent of voltage regulator
[NASA-CASE-XMS-01991] c09 N71-21449
- High voltage divider system for attenuating high voltages to convenient levels suitable for introduction to measuring circuits
[NASA-CASE-XLE-02008] c09 N71-21583
- Power supply with overload protection for series stage transistor
[NASA-CASE-XMS-00913] c10 N71-23543
- Voltage controlled, variable frequency relaxation oscillator with MOSFET variable current feed
[NASA-CASE-GSC-10022-1] c10 N71-25882
- Design and development of buck-boost voltage regulator circuit with additive or subtractive alternating current impressed on variable direct current source voltage
[NASA-CASE-GSC-10735-1] c10 N71-26085
- Voltage range selection apparatus for sensing and applying voltages to electronic instruments without loading signal source
[NASA-CASE-XMS-06497] c14 N71-26244
- Dissipative voltage regulator system for minimizing heat dissipation
[NASA-CASE-GSC-10891-1] c10 N71-26626
- Power point tracker for maintaining optimal output voltage of power source
[NASA-CASE-GSC-10376-1] c14 N71-27407
- Microwave power divider for providing variable output power to output waveguide in fixed waveguide system
[NASA-CASE-NPO-11031] c07 N71-33606
- Relay controlled voltage switching unit for scanning circuitry of star tracker
[NASA-CASE-NPO-11253] c09 N72-17157
- Switching type voltage regulator with relatively simple circuit arrangement
[NASA-CASE-LEW-11005-1] c09 N72-21243
- Inductive-capacitive loops as load insensitive power converters
[NASA-CASE-ERC-10268] c09 N72-25252
- Regulated dc-to-dc converter for voltage step-up or step-down with input-output isolation
[NASA-CASE-HQN-10792-1] c33 N74-11049
- Overvoltage protection network
[NASA-CASE-ARC-10197-1] c33 N74-17929
- Low distortion automatic phase control circuit --- voltage controlled phase shifter
[NASA-CASE-MPS-21671-1] c33 N74-22885
- Voltage monitoring system
[NASA-CASE-KSC-10736-1] c33 N75-19521
- Transformer regulated self-stabilizing chopper
[NASA-CASE-XGS-09186] c33 N78-17295
- Voltage regulator for battery power source --- using a bipolar transistor
[NASA-CASE-FRC-10116-1] c33 N79-23345
- Buck/boost regulator
[NASA-CASE-GSC-12360-1] c33 N81-19392
- VOLTMETERS**
- Voltage monitoring system
[NASA-CASE-KSC-10736-1] c33 N75-19521
- VOLUMETRIC ANALYSIS**
- Volumetric direct nuclear pumped laser
[NASA-CASE-LAR-12183-1] c36 N79-18307
- VOMITING**
- Venting device for pressurized space suit helmet to eliminate vomit expelled by crewmen
[NASA-CASE-XMS-09652-1] c05 N71-26333
- VORTEX BREAKDOWN**
- Wingtip vortex dissipator for aircraft
[NASA-CASE-LAR-11645-1] c02 N77-10001
- VORTEX FLAPS**
- Leading edge vortex flaps for drag reduction --- during subsonic flight
[NASA-CASE-LAR-12750-1] c02 N81-19016
- VORTEX GENERATORS**
- Multiple vortex amplifier system as fluid valve
[NASA-CASE-XMF-04709] c15 N71-15609
- Vortex generator for controlling the dispersion of effluents in a flowing liquid
[NASA-CASE-LAR-12045-1] c34 N77-24423
- Wingtip vortex turbine
[NASA-CASE-LAR-12544-1] c07 N81-27096
- VORTICES**
- Vortex-lift roll-control device
[NASA-CASE-LAR-11868-2] c08 N79-14108
- VULCANIZING**
- Method for compression molding of thermosetting plastics utilizing a temperature gradient across the plastic to cure the article
[NASA-CASE-LAR-10489-1] c31 N74-18124

W

WAFERS

- Separation of semiconductor wafer into chips bounded by scribe lines
[NASA-CASE-ERC-10138] c26 N71-14354
- Apparatus for use in examining the lattice of a semiconductor wafer by X-ray diffraction
[NASA-CASE-MPS-23315-1] c76 N78-24950
- System for slicing silicon wafers
[NASA-CASE-NPO-14406-1] c37 N80-29703
- High voltage planar multijunction --- solar cells
[NASA-CASE-LEW-13400-1] c44 N81-16528
- High voltage V-groove solar cell
[NASA-CASE-LEW-13401-1] c44 N81-16529

WALL TEMPERATURE

- Thermocouple apparatus for measuring wall temperatures in regeneratively cooled rocket engines having thin walled cooling passages
[NASA-CASE-XLE-05230-2] c14 N73-13417
- Structural heat pipe --- for spacecraft wall thermal insulation system
[NASA-CASE-GSC-11619-1] c34 N75-12222
- Thermal control canister
[NASA-CASE-GSC-12253-1] c34 N79-31523
- Curved film cooling admission tube
[NASA-CASE-LEW-13174-1] c34 N81-12363

WALLS

- Metal ribbon wrapped outer wall for regeneratively cooled combustion chamber
[NASA-CASE-XLE-00164] c15 N70-36411

WARNING SYSTEMS

- Alarm system design for monitoring one or more relay circuits
[NASA-CASE-XMS-10984-1] c10 N71-19417
- Unsaturating magnetic core transformer design with warning signal for electrical power processing equipment
[NASA-CASE-ERC-10125] c09 N71-24893

- Electrical failure detector in solid rocket propellant motor insulation against thermal degradation by fuel grain
[NASA-CASE-XNP-03968] c14 N71-27186
- Device for generating and controlling combustion products for testing of fire detection system
[NASA-CASE-GSC-11095-1] c14 N72-10375
- Vertically stacked collinear array of independently fed omnidirectional antennas for use in collision warning systems on commercial aircraft
[NASA-CASE-LAR-10545-1] c09 N72-21244
- Development and operating principles of collision warning system for aircraft accident prevention
[NASA-CASE-HQN-10703] c21 N73-13643
- Pilot warning indicator system of intruder aircraft
[NASA-CASE-ERC-10226-1] c14 N73-16483
- Silent alarm system for multiple room facility or school
[NASA-CASE-NPO-11307-1] c10 N73-30205
- Development and characteristics of electronic signalling system and data processing equipment for warning systems to avoid midair collisions between aircraft
[NASA-CASE-LAR-10717-1] c21 N73-30641
- Inverter ratio failure detector
[NASA-CASE-NPO-13160-1] c35 N74-18090
- Hearing aid malfunction detection system
[NASA-CASE-MSC-14916-1] c33 N78-10375
- Automatic communication signal monitoring system
[NASA-CASE-NPO-13941-1] c32 N79-10262
- Passive intrusion detection system
[NASA-CASE-NPO-13804-1] c33 N80-23559
- Intrusion detection method and apparatus --- monitoring unwanted subterranean entry and departure
[NASA-CASE-ARC-11317-1] c35 N81-19430
- WASTE DISPOSAL**
- Fecal waste disposal container
[NASA-CASE-XMS-06761] c05 N69-23192
- Airlock for waste transferal from pressurized enclosure aboard space vehicle to waste receiver at negative pressure
[NASA-CASE-MPS-20922] c31 N72-20840
- Pressurized tank for feeding liquid waste into processing equipment
[NASA-CASE-LAR-10365-1] c05 N72-27102
- Reduced gravity fecal collector seat and urinal
[NASA-CASE-MPS-22102-1] c54 N74-20725
- Airlock
[NASA-CASE-MPS-20922-1] c18 N74-22136
- Automatic liquid inventory collecting and dispensing unit
[NASA-CASE-LAR-11071-1] c35 N75-19611
- Automatic biowaste sampling
[NASA-CASE-MSC-14640-1] c54 N76-14804
- WASTE ENERGY UTILIZATION**
- Automotive absorption air conditioner utilizing solar and motor waste heat
[NASA-CASE-NPO-15183] c44 N80-29843
- WASTE UTILIZATION**
- Simultaneous treatment of SO₂ containing stack gases and waste water
[NASA-CASE-MSC-16258-1] c45 N79-12584
- WASTE WATER**
- Water system virus detection
[NASA-CASE-MSC-16098-1] c51 N79-10693
- Process for purification of waste water produced by a Kraft process pulp and paper mill
[NASA-CASE-NPO-13847-2] c85 N79-17747
- WATER**
- Variable water load for dissipating large amounts of electrical power during high voltage power supply tests
[NASA-CASE-XNP-05381] c09 N71-20842
- Gas chromatographic method for determining water in nitrogen tetroxide rocket propellant
[NASA-CASE-NPO-10234] c06 N72-17094
- Hydrogen rich gas generator
[NASA-CASE-NPO-15342-1] c37 N76-16446
- Solar hydrogen generator
[NASA-CASE-LAR-11361-1] c44 N77-22607
- Remote water monitoring system
[NASA-CASE-LAR-11973-1] c35 N78-27384
- Solar photolysis of water
[NASA-CASE-NPO-14126-1] c44 N79-11470
- WATER FLOW**
- Potable water dispenser
[NASA-CASE-MPS-21115-1] c54 N74-12779
- WATER INJECTION**
- Reentry communication by injection of water droplets into plasma layer surrounding space vehicle
[NASA-CASE-XLA-01552] c07 N71-11284
- WATER LANDING**
- Parachute system for lowering manned spacecraft from post-reentry to ocean landing
[NASA-CASE-XLA-00195] c02 N70-38009
- Spacecraft design with single point aerodynamic and hydrodynamic stability for emergency transport of men from space station to splashdown
[NASA-CASE-MSC-13281] c31 N72-18659
- WATER MANAGEMENT**
- Description of electrical equipment and system for purification of waste water by producing silver ions for bacterial control
[NASA-CASE-MSC-10960-1] c03 N71-24718
- Solar-powered pump
[NASA-CASE-NPO-13567-1] c44 N76-29701
- WATER POLLUTION**
- Utilization of solar radiation by solar still for converting salt and brackish water into potable water
[NASA-CASE-XMS-04533] c15 N71-23086
- Portable tester for monitoring bacterial contamination by adenosine triphosphate light reaction
[NASA-CASE-GSC-10879-1] c14 N72-25413
- Method and automated apparatus for detecting coliform organisms
[NASA-CASE-MSC-16777-1] c51 N80-27067
- WATER QUALITY**
- Rapid, quantitative determination of bacteria in water
[NASA-CASE-GSC-12158-1] c51 N78-22585
- Fluid sample collection and distribution system --- qualitative analysis of aqueous samples from several points
[NASA-CASE-MSC-16841-1] c34 N79-24285
- WATER RECLAMATION**
- Potable water reclamation from human wastes in zero-G environment
[NASA-CASE-XLA-03213] c05 N71-11207
- Water system virus detection
[NASA-CASE-MSC-16098-1] c51 N79-10693
- Water separator
[NASA-CASE-XMS-01295-1] c37 N79-21345
- WATER RESOURCES**
- Radar target for remotely sensing hydrological phenomena
[NASA-CASE-LAR-12344-1] c43 N80-18498
- WATER TEMPERATURE**
- Differential thermopile for measuring cooling water temperature rise
[NASA-CASE-XAC-00812] c14 N71-15598
- WATER TREATMENT**
- Description of electrical equipment and system for purification of waste water by producing silver ions for bacterial control
[NASA-CASE-MSC-10960-1] c03 N71-24718
- Method of preparing water purification membranes --- polymerization of allyl amine as thin films in plasma discharge
[NASA-CASE-ARC-10643-1] c25 N75-12087
- Air removal device --- for purification of water under zero gravity conditions
[NASA-CASE-XLA-8914-2] c34 N76-23522
- Iodine generator for reclaimed water purification
[NASA-CASE-MSC-14632-1] c54 N78-14784
- Water system virus detection
[NASA-CASE-MSC-16098-1] c51 N79-10693
- Simultaneous treatment of SO₂ containing stack gases and waste water
[NASA-CASE-MSC-16258-1] c45 N79-12584
- Process for purification of waste water produced by a Kraft process pulp and paper mill
[NASA-CASE-NPO-13847-2] c85 N79-17747
- Ozonation of cooling tower waters
[NASA-CASE-NPO-14340-1] c45 N80-14579
- Reverse osmosis membrane of high urea rejection properties --- water purification
[NASA-CASE-ARC-10980-1] c27 N80-23452
- Membrane consisting of polyquaternary amine ion exchange polymer network interpenetrating the

- chains of thermoplastic matrix polymer
[NASA-CASE-NPO-14001-1] c27 N81-14076
- WATER VAPOR**
Equipment for measuring partial water vapor pressure in gas tank
[NASA-CASE-XMS-01618] c14 N71-20741
Cell and method for electrolysis of water and anode
[NASA-CASE-MSC-16394-1] c28 N81-24280
- WATER WAVES**
Surface roughness measuring system --- synthetic aperture radar measurements of ocean wave height and terrain peaks
[NASA-CASE-NPO-13862-1] c35 N79-10391
Oceanic wave measurement system
[NASA-CASE-MPS-23862-1] c48 N80-18667
- WATERPROOFING**
Glass-to-metal seals comprising relatively high expansion metals
[NASA-CASE-LEW-10698-1] c37 N74-21063
- WATERWAVE ENERGY CONVERSION**
Natural turbulence electrical power generator --- using wave action or random motion
[NASA-CASE-LAR-11551-1] c44 N80-29834
- WAVE AMPLIFICATION**
Distributed feedback acoustic surface wave oscillator
[NASA-CASE-NPO-13673-1] c71 N77-26919
- WAVE DIFFRACTION**
Diffractoid grating configuration for X-ray and ultraviolet focusing
[NASA-CASE-GSC-12357-1] c74 N80-21140
- WAVE FRONT RECONSTRUCTION**
Recording and reconstructing focused image holograms
[NASA-CASE-ERC-10017] c16 N71-15567
- WAVE GENERATION**
Wind tunnel air flow modulating device and apparatus for selectively generating wave motion in wind tunnel airstream
[NASA-CASE-XLA-00112] c11 N70-33287
Linear sawtooth voltage wave generator with transistor timing circuit having capacitor and zener diode feedback loops
[NASA-CASE-XMS-01315] c09 N70-41675
Sign wave generation simulator for variable amplitude, frequency, damping, and phase pulses for oscilloscope display
[NASA-CASE-NPO-10251] c10 N71-27365
Wideband generator for producing sine wave quadrature and second harmonic of input signal
[NASA-CASE-NPO-11133] c10 N72-20223
Material suspension within an acoustically excited resonant chamber --- at near weightless conditions
[NASA-CASE-NPO-13263-1] c12 N75-24774
Superconducting gyrotron for high power high efficiency microwave generator/amplifier application
[NASA-CASE-NPO-14975-1] c33 N80-29584
- WAVE PROPAGATION**
Maser amplifier slow wave structure --- detecting weak signals from spacecraft
[NASA-CASE-NPO-15211-1] c36 N81-24425
- WAVE REFLECTION**
Surface defect detection by reflected microwave radiation pattern
[NASA-CASE-ARC-10009-1] c15 N71-17822
Millimeter wave antenna system for spacecraft use
[NASA-CASE-GSC-10949-1] c07 N71-28965
- WAVE SCATTERING**
Device and method for determining X ray reflection efficiency, scattering properties, and surface finish of optical surfaces
[NASA-CASE-MPS-20243] c23 N73-13662
- WAVEFORMS**
Variable frequency magnetic coupled multivibrator with output signal of constant amplitude and waveform
[NASA-CASE-XGS-00131] c09 N70-38995
Cathode ray oscilloscope for analyzing electrical waveforms representing amplitude distribution of time function
[NASA-CASE-XNP-01383] c09 N71-10659
Peak polarity selector for monitoring waveforms
[NASA-CASE-PRC-10010] c10 N71-24662
Development of family of frequency to amplitude converters for frequency analysis of complex input signal waveforms
- [NASA-CASE-MSC-12395] c09 N72-25257
Device for performing statistical time-series analysis of complex electrical signal waveforms
[NASA-CASE-MSC-12428-1] c10 N73-25240
Low distortion receiver for hi-level baseband PCM waveforms
[NASA-CASE-MSC-14557-1] c32 N76-16249
Speech analyzer
[NASA-CASE-GSC-11898-1] c32 N77-30309
Lightning current waveform measuring system
[NASA-CASE-KSC-11018-1] c33 N79-10337
- WAVEGUIDE ANTENNAS**
Planar array circularly polarized antenna with wall slot excitation
[NASA-CASE-NPO-10301] c07 N72-11148
- WAVEGUIDE FILTERS**
Microwave power divider for providing variable output power to output waveguide in fixed waveguide system
[NASA-CASE-NPO-11031] c07 N71-33606
- WAVEGUIDE LASERS**
Tunable injection-locked pulsed CO2 laser
[NASA-CASE-NFO-14984-1] c36 N81-15350
- WAVEGUIDE WINDOWS**
Broadband microwave waveguide window to compensate dielectric material filling
[NASA-CASE-XNP-08880] c09 N71-24808
- WAVEGUIDES**
Dual waveguide mode source for controlling amplitudes of two modes
[NASA-CASE-XNP-03134] c07 N71-10676
Design of folded traveling wave maser structure
[NASA-CASE-XNP-05219] c16 N71-15550
Quasi-optical microwave circuit with dielectric body for use with oversize waveguides
[NASA-CASE-ERC-10011] c07 N71-29065
Microwave waveguide mixer
[NASA-CASE-ERC-10179] c07 N72-20141
Waveguide, thin film window and microwave irises
[NASA-CASE-LAR-10513-1] c07 N72-25170
Development of thin film microwave iris installed in microwave waveguide transverse to flow of energy in waveguide
[NASA-CASE-LAR-10511-1] c09 N72-29172
Resonant waveguide stark cell --- using microwave spectrometers
[NASA-CASE-LAR-11352-1] c33 N75-26245
Diffused waveguiding capillary tube with distributed feedback for a gas laser
[NASA-CASE-NPO-13544-1] c36 N76-18428
Dielectric-loaded waveguide circulator for cryogenically cooled and cascaded maser waveguide structures
[NASA-CASE-NPO-14254-1] c36 N80-18372
Support assembly for cryogenically coolable low-noise choke waveguide
[NASA-CASE-NPO-14253-1] c32 N80-32605
Coaxial phased array antenna
[NASA-CASE-MSC-16800-1] c32 N81-14187
Ladder supported ring bar circuit
[NASA-CASE-LEW-13570-1] c33 N81-24348
Maser amplifier slow wave structure --- detecting weak signals from spacecraft
[NASA-CASE-NFO-15211-1] c36 N81-24425
Waveguide cooling system
[NASA-CASE-NFO-15401-1] c33 N81-29344
- WAVELENGTHS**
Method and apparatus using temperature control for wavelength tuning of liquid lasers
[NASA-CASE-ERC-10187] c16 N69-31343
Multiple wavelength radiation measuring instrument for determining hot body or gas temperature
[NASA-CASE-XLE-00011] c14 N70-41946
Optical system for selecting particular wavelength light beams from multiple wavelength light source
[NASA-CASE-ERC-10248] c14 N72-17323
Development of radiant energy sensor to detect the radiant energy wavelength bands from portions of radiating body
[NASA-CASE-ERC-10174] c14 N72-25409
Dual wavelength system for monitoring film deposition
[NASA-CASE-MPS-20675] c26 N73-26751
Dual wavelength scanning Doppler velocimeter --- without perturbation of flow fields
[NASA-CASE-ARC-10637-1] c35 N75-16783

- Diatomic infrared gasdynamic laser --- for producing different wavelengths
[NASA-CASE-ARC-10370-1] c36 N75-31426
- Dual laser optical system and method for studying fluid flow
[NASA-CASE-MFS-25315-1] c36 N81-19440
- Fluorescent radiation converter
[NASA-CASE-GSC-12528-1] c74 N81-24900
- Acoustic suspension system
[NASA-CASE-NFO-15435-1] c71 N81-27887
- Extended range X-ray telescope
[NASA-CASE-MFS-25282-1] c89 N81-34122
- WAVES**
- Natural turbulence electrical power generator --- using wave action or random motion
[NASA-CASE-LAR-11551-1] c44 N80-29834
- WEATHERPROOFING**
- Weatherproof helix antenna
[NASA-CASE-XKS-08485] c67 N71-19493
- WEBS (SHEETS)**
- Method and apparatus for measuring web material wound on a reel
[NASA-CASE-GSC-11902-1] c38 N77-17495
- WEBS (SUPPORTS)**
- Integrated gas turbine engine-nacelle
[NASA-CASE-LEW-12389-2] c67 N78-18066
- Integrated gas turbine engine-nacelle
[NASA-CASE-LEW-12389-3] c67 N79-14096
- WEDGES**
- Two dimensional wedge/translating shroud nozzle
[NASA-CASE-LAR-11919-1] c67 N78-27121
- WEIGHT (MASS)**
- Suspended mass oscillation damper based on impact energy absorption for damping wind induced oscillations of tall stacks, antennas, and umbilical towers
[NASA-CASE-LAR-10193-1] c15 N71-27146
- WEIGHT INDICATORS**
- Device for monitoring a change in mass in varying gravimetric environments
[NASA-CASE-MFS-21556-1] c35 N74-26945
- WEIGHT MEASUREMENT**
- Weighing and recording device for obtaining precise automatic record of small changes in force
[NASA-CASE-XLA-02605] c14 N71-10773
- Device for monitoring a change in mass in varying gravimetric environments
[NASA-CASE-MFS-21556-1] c35 N74-26945
- WEIGHTLESSNESS**
- Apparatus for cryogenic liquid storage with heat transfer reduction and for liquid transfer at zero gravity conditions
[NASA-CASE-XLE-00345] c15 N70-38020
- Liquid-gas separator adapted for use in zero gravity environment - drawings
[NASA-CASE-XMS-01624] c15 N70-40062
- Expulsion and measuring device for determining quantity of liquid in tank under conditions of weightlessness
[NASA-CASE-XMS-01546] c14 N70-40233
- Collapsible auxiliary tank for restarting liquid propellant rocket motors under zero gravity
[NASA-CASE-XNP-01390] c28 N70-41275
- Absorbent apparatus for separating gas from liquid-gas stream used in environmental control under zero gravity conditions
[NASA-CASE-XMS-01492] c05 N70-41297
- Potable water reclamation from human wastes in zero-G environment
[NASA-CASE-XLA-03213] c05 N71-11207
- Describing apparatus for separating gas from cryogenic liquid under zero gravity and for venting gas from fuel tank
[NASA-CASE-XLE-00586] c15 N71-15568
- Cable suspension and inclined walkway system for simulating reduced or zero gravity environments
[NASA-CASE-XLA-01787] c11 N71-16028
- Development of apparatus for simulating zero gravity conditions
[NASA-CASE-MFS-12750] c27 N71-16223
- Quick disconnect latch and handle combination for mounting articles on walls or supporting bases in spacecraft under zero gravity conditions
[NASA-CASE-MFS-11132] c15 N71-17649
- Gauge for measuring quantity of liquid in spherical tank in reduced gravity
[NASA-CASE-XMS-06236] c14 N71-21007
- Zero gravity apparatus utilizing pneumatic decelerating means to create payload subjected to zero gravity conditions by dropping its height
[NASA-CASE-XMF-06515] c14 N71-23227
- Method and apparatus for applying compressional forces to skeletal structure of subject to simulate force during ambulatory conditions
[NASA-CASE-ARC-10100-1] c05 N71-24738
- Device which separates and screens particles of soil samples for vidicon viewing in vacuum and reduced gravity environments
[NASA-CASE-XNP-09770-3] c11 N71-27036
- Description of method for making homogeneous foamed materials in weightless environment using materials having different physical properties
[NASA-CASE-XMF-09902] c15 N72-11387
- Manipulator for remote handling in zero gravity environment
[NASA-CASE-MFS-14405] c15 N72-28495
- Apparatus for mixing two or more liquids under zero gravity conditions
[NASA-CASE-LAR-10195-1] c15 N73-19458
- Zero gravity liquid transfer device, using spiral shaped screen
[NASA-CASE-KSC-10626] c14 N73-27378
- Reduced gravity fecal collector seat and urinal
[NASA-CASE-MFS-22102-1] c54 N74-20725
- Apparatus for conducting flow electrophoresis in the substantial absence of gravity
[NASA-CASE-MFS-21394-1] c34 N74-27744
- Rotary plant growth accelerating apparatus --- weightlessness
[NASA-CASE-ARC-10722-1] c51 N75-25503
- Fluid control apparatus and method
[NASA-CASE-LAR-11110-1] c34 N75-26282
- Method for manufacturing mirrors in zero gravity environment
[NASA-CASE-MSC-12611-1] c12 N76-15189
- Air removal device --- for purification of water under zero gravity conditions
[NASA-CASE-XLA-8914-2] c34 N76-23522
- Fluid mass sensor for a zero gravity environment
[NASA-CASE-MSC-14653-1] c35 N77-19385
- Method of crystallization --- in gravity-free environments
[NASA-CASE-MFS-23001-1] c76 N77-32919
- Passive propellant system
[NASA-CASE-MFS-23642-1] c20 N80-10278
- Method and apparatus for producing concentric hollow spheres --- inertial confinement fusion targets
[NASA-CASE-NFO-14596-1] c31 N81-33319
- WEIGHTLESSNESS SIMULATION**
- Reduced gravity liquid configuration simulator to study propellant behavior in rocket fuel tanks
[NASA-CASE-XLE-02624] c12 N69-39988
- Apparatus for measuring human body mass in zero or reduced gravity environment
[NASA-CASE-XMS-03371] c05 N70-42000
- Harness assembly adapted to support man on ground based apparatus which simulates weightlessness
[NASA-CASE-MFS-14671] c05 N71-12341
- Whole body measurement systems --- for weightlessness simulation
[NASA-CASE-MSC-13972-1] c52 N74-10975
- WELD STRENGTH**
- Grain refinement control in TIG arc welding
[NASA-CASE-MSC-19095-1] c37 N75-19683
- WELD TESTS**
- Nondestructive radiographic tests of resistance welds
[NASA-CASE-XNP-02588] c15 N71-18613
- Method and apparatus for testing integrated circuit microtab welds
[NASA-CASE-ARC-10176-1] c15 N72-21464
- WELDED JOINTS**
- Apparatus for welding blades to rotors
[NASA-CASE-LEW-10533-2] c37 N74-11300
- Ultrasonic scanning system for in-place inspection of brazed tube joints
[NASA-CASE-MFS-20767-1] c38 N74-15130
- Device for measuring the ferrite content in an austenitic stainless-steel weld
[NASA-CASE-MFS-22907-1] c26 N76-18257

- Capillary flow weld-bonding
[NASA-CASE-LAR-11726-1] c37 N76-27568
- WELDED STRUCTURES**
- Grain refinement control in TIG arc welding
[NASA-CASE-MSC-19095-1] c37 N75-19683
- Flanged major modular assembly jig
[NASA-CASE-MSC-19372-1] c39 N76-31562
- Weld-bonded titanium structures
[NASA-CASE-LAR-11549-1] c37 N77-11397
- Bimetallic junctions
[NASA-CASE-LEW-11573-1] c26 N77-28265
- WELDING**
- Segmented back-up bar for butt welding large tubular structures such as rocket booster bodies or tanks
[NASA-CASE-XMF-00640] c15 N70-39924
- Flexible backup bar for welding awkwardly shaped structures
[NASA-CASE-XMF-00722] c15 N70-40204
- Apparatus for welding sheet material --- butt joints
[NASA-CASE-XMS-01330] c37 N75-27376
- Weld-bonded titanium structures
[NASA-CASE-LAR-11549-1] c37 N77-11397
- Method and apparatus for holding two separate metal pieces together for welding
[NASA-CASE-GSC-12318-1] c37 N80-23655
- WELDING MACHINES**
- Computer controlled apparatus for maintaining welding torch angle and velocity during seam tracking
[NASA-CASE-XMF-03287] c15 N71-15607
- Welding torch with automatic speed controller using speed sensing wheel and closed servo system
[NASA-CASE-XMF-01730] c15 N71-23050
- Development of electric weeding torch with casing on one end to form inert gas shield
[NASA-CASE-XMF-02330] c15 N71-23798
- Development of apparatus for automatically changing carriage speed of welding machine to obtain constant speed of torch along work surface
[NASA-CASE-XMF-07069] c15 N71-23815
- Computerized system for translating a torch head
[NASA-CASE-MFS-23620-1] c37 N79-10421
- WET CELLS**
- Indicator device for monitoring charge of wet cell battery, using semiconductor light emitter and photodetector
[NASA-CASE-NPO-10194] c03 N71-20407
- WETTING**
- Anti-wettable materials brazing processes using titanium and zirconium for surface pretreatment
[NASA-CASE-XMS-03537] c15 N69-21471
- WHEATSTONE BRIDGES**
- Self-balancing strain gage transducer with bridge circuit
[NASA-CASE-MFS-12827] c14 N71-17656
- Development of method for improving signal to noise ratio and accuracy of wheatstone bridge type radiation measuring instrument
[NASA-CASE-XLA-02810] c14 N71-25501
- Temperature control system comprised of wheatstone bridge with RC circuit
[NASA-CASE-NPO-11304] c14 N73-26430
- WHEELS**
- An improved suspension system for a wheel rolling on a flat track --- bearings for directional antennas
[NASA-CASE-NPO-14395-1] c37 N79-12446
- WHISKER COMPOSITES**
- Composites reinforced with short metal fibers or whiskers and having high tensile strength
[NASA-CASE-XLE-00228] c17 N70-38490
- WHISKERS (SINGLE CRYSTALS)**
- Catalyst for increased growth of boron carbide crystal whiskers
[NASA-CASE-IRQ-03903] c15 N69-21922
- WICKS**
- Method of forming a wick for a heat pipe
[NASA-CASE-NPO-13391-1] c34 N76-27515
- WIDE ANGLE LENSES**
- Wide angle eyepiece with long eye-relief distance
[NASA-CASE-XMS-06056-1] c23 N71-24857
- WIDEBAND COMMUNICATION**
- Wideband heterodyne receiver for laser communication system
[NASA-CASE-GSC-12053-1] c32 N77-28346
- Multiple band circularly polarized microstrip antenna
[NASA-CASE-MSC-18334-1] c32 N80-32604
- WINCHES**
- Design and characteristics of device for showing amount of cable payed out from winch and load imposed
[NASA-CASE-MSC-12052-1] c15 N71-24599
- WIND EFFECTS**
- Mercury filled pendulum damper for controlling bending vibration induced by wind effects
[NASA-CASE-LAR-10274-1] c14 N71-17626
- WIND MEASUREMENT**
- Passive optical wind and turbulence remote detection system
[NASA-CASE-XMF-14032] c20 N71-16340
- Maxometers for measuring peak wind speeds during severe environmental conditions
[NASA-CASE-MFS-20916] c14 N73-25460
- Wind sensor
[NASA-CASE-NPO-13462-1] c35 N76-24524
- Focused laser Doppler velocimeter
[NASA-CASE-MFS-23178-1] c35 N77-10493
- Wind measurement system
[NASA-CASE-MFS-23362-1] c47 N77-10753
- WIND PROFILES**
- Free-fall body for obtaining wind velocity profiles by radar tracking
[NASA-CASE-XLA-02081] c20 N71-16281
- WIND TUNNEL APPARATUS**
- Wind tunnel air flow modulating device and apparatus for selectively generating wave motion in wind tunnel airstream
[NASA-CASE-XLA-00112] c11 N70-33287
- Electric arc device for minimizing electrode ablation and heating gases to supersonic or hypersonic wind tunnel temperatures
[NASA-CASE-XAC-00319] c25 N70-41628
- Free flight suspension system for use with aircraft models in wind tunnel tests
[NASA-CASE-XLA-00939] c11 N71-15926
- Burst diaphragm flow initiator for installation in short duration wind tunnels
[NASA-CASE-MFS-12915] c11 N71-17600
- Electric arc heater with supersonic nozzle and fixed arc length for use in high temperature wind tunnels
[NASA-CASE-XAC-01677] c09 N71-20816
- Design and characteristics of device for launching models in wind tunnels without disturbance of air flow
[NASA-CASE-XNP-03578] c11 N71-23030
- Development of wind tunnel microphone structure to minimize effects of vibrations and eliminate unwanted signals in microphone output
[NASA-CASE-XNP-00250] c11 N71-28779
- Wind tunnel
[NASA-CASE-LAR-10135-1] c09 N79-21083
- Rotary target V-block --- aligning wind tunnel apparatus for optical measurement
[NASA-CASE-LAR-12007-2] c74 N79-25876
- WIND TUNNEL DRIVES**
- Triggering system for electric arc driven impulse wind tunnel
[NASA-CASE-XMF-00411] c11 N70-36913
- WIND TUNNEL MODELS**
- Wind tunnel method for simulating flow fields around blunt vehicles entering planetary atmospheres without involving high temperatures
[NASA-CASE-LAR-11138] c12 N71-20436
- Multilegged support system for wind tunnel test models subjected to thermal dynamic loading
[NASA-CASE-XLA-01326] c11 N71-21481
- Design and characteristics of device for launching models in wind tunnels without disturbance of air flow
[NASA-CASE-XNP-03578] c11 N71-23030
- Damper system for alleviating air flow shock loads on wind tunnel models
[NASA-CASE-XLA-09480] c11 N71-33612
- Wind tunnel model and method
[NASA-CASE-LAR-10812-1] c09 N74-17955
- Method for determining thermo-physical properties of specimens --- photographic recording of changes in thin film phase-change temperature indicating material in wind tunnel
[NASA-CASE-LAR-11053-1] c25 N74-18551
- Metric half-span model support system
[NASA-CASE-LAR-12441-1] c09 N80-24334

Aeroelastic instability stoppers for wind-tunnel models
[NASA-CASE-LAR-12720-1] c09 N81-31229

Aeroelastic instability stoppers for wind-tunnel models
[NASA-CASE-LAR-12458-1] c09 N81-31230

WIND TUNNEL NOZZLES
Multi-purpose wind tunnel reaction control model block
[NASA-CASE-MSC-19706-1] c09 N78-31129

WIND TUNNEL TESTS
Metallic hot wire anemometer --- for high speed wind tunnel tests
[NASA-CASE-ARC-10911-1] c35 N77-20400

Multi-purpose wind tunnel reaction control model block
[NASA-CASE-MSC-19706-1] c09 N78-31129

Metric half-span model support system
[NASA-CASE-LAR-12441-1] c09 N80-24334

WIND TUNNELS
Thin film gauge --- for measuring convective heat transfer rates along test surfaces in wind tunnels
[NASA-CASE-NPO-10617-1] c35 N74-22695

Wind tunnel flow generation section
[NASA-CASE-ARC-10710-1] c09 N75-12969

Apparatus for reducing aerodynamic noise in a wind tunnel
[NASA-CASE-MFS-23099-1] c09 N76-23273

Static pressure orifice system testing method and apparatus
[NASA-CASE-LAR-12269-1] c35 N80-18358

WIND VELOCITY MEASUREMENT
Free-fall body for obtaining wind velocity profiles by radar tracking
[NASA-CASE-XLA-02081] c20 N71-16281

WINDING
Black body radiometer design with temperature sensing and cavity heat source cone winding
[NASA-CASE-XNP-09701] c14 N71-26475

Pulse coupling circuit with switch between generator and winding
[NASA-CASE-LEW-10433-1] c09 N72-22197

WINDMILLS (WINDPOWERED MACHINES)
Electrical power generating system --- for windpowered generation
[NASA-CASE-MFS-24368-3] c33 N81-22280

WINDOWS (APERTURES)
Waveguide, thin film window and microwave irises
[NASA-CASE-LAR-10513-1] c07 N72-25170

Observation window for internal gas confining chamber
[NASA-CASE-NPO-10690] c11 N73-12265

WINDPOWER UTILIZATION
Amplified wind turbine apparatus
[NASA-CASE-MFS-23830-1] c44 N80-21831

WINDPOWERED GENERATORS
Wind wheel electric power generator
[NASA-CASE-MFS-23515-1] c44 N80-21828

Amplified wind turbine apparatus
[NASA-CASE-MFS-23830-1] c44 N80-21831

Electrical power generating system --- for windpowered generation
[NASA-CASE-MFS-24368-3] c33 N81-22280

WINDSHIELDS
Transparent fire resistant polymeric structures
[NASA-CASE-ARC-10813-1] c27 N76-16230

WING FLAPS
Upper surface, external flow, jet-augmented flap configuration for high wing jet aircraft for noise reduction
[NASA-CASE-XLA-00087] c02 N70-33332

WING PROFILES
Supersonic aircraft configuration providing for variable aspect ratio and variable sweep wings
[NASA-CASE-XLA-00166] c02 N70-34178

An annular wing
[NASA-CASE-PRC-11007-2] c02 N79-24959

WING ROOTS
Solar powered aircraft
[NASA-CASE-LAR-12615-1] c05 N81-32138

WING TIP VORTICES
Wingtip vortex dissipator for aircraft
[NASA-CASE-LAR-11645-1] c02 N77-10001

WING TIPS
Smoke generator
[NASA-CASE-ARC-10905-1] c37 N77-13418

Wingtip vortex turbine
[NASA-CASE-LAR-12544-1] c07 N81-27096

WINGS

Development of auxiliary lifting system to provide ferry capability for entry vehicles
[NASA-CASE-LAR-10574-1] c11 N73-13257

Surface finishing --- for aircraft wings
[NASA-CASE-MSC-12631-1] c24 N77-28225

Free wing assembly for an aircraft
[NASA-CASE-PRC-10092-1] c05 N79-12061

Detection of the transitional layer between laminar and turbulent flow areas on a wing surface --- using an accelerometer to measure pressure levels during wind tunnel tests
[NASA-CASE-LAR-12261-1] c02 N80-20224

Decoupler pylon: Wing/store flutter suppressor
[NASA-CASE-LAR-12468-1] c08 N80-22359

System for use in conducting wake investigation for a wing in flight --- differential pressure measurements for drag investigations
[NASA-CASE-PRC-11024-1] c02 N80-28300

WIRE

Transpiration cooled turbine blade made from metallic or ceramic wires
[NASA-CASE-XLE-00020] c15 N70-33226

Soldering device particularly suited to making high quality wiring joints for aerospace engineering utilizing capillary attraction to regulate flow of solder
[NASA-CASE-XLA-08911] c15 N71-27214

Device for bending metal ribbon or wire
[NASA-CASE-XLA-05966] c15 N72-12408

Method of fabricating equal length insulated wire
[NASA-CASE-PRC-10038] c15 N72-20444

Shielded flat conductor cable of ribbonlike wires laminates in thin flexible insulation
[NASA-CASE-MFS-13687-2] c09 N72-22198

Electrical resistance butt welder for welding fine gauge tungsten/rhenium thermocouple wire
[NASA-CASE-LAR-10103-1] c15 N73-14468

Twisted wire or tube superconductor for filament windings
[NASA-CASE-LEW-11015] c26 N73-32571

WIRE BRIDGE CIRCUITS

Black body cavity radiometer with thermal resistance wire bridge circuit
[NASA-CASE-XNP-08961] c14 N71-24809

WIRE CLOTH

Insulating system for receptacles of liquefied gases using wire cloth for forming frost layer
[NASA-CASE-XMP-00341] c15 N70-33323

Method for making screen with unlimited fineness of mesh and screen thickness
[NASA-CASE-XLE-00953] c15 N71-15966

WIRE WINDING

Adjustable spiral wire winding device
[NASA-CASE-XMS-02383] c15 N71-15918

Superconducting alternator design with cryogenic fluid for cooling windings below critical temperature
[NASA-CASE-XLE-02823] c09 N71-23443

Direct current motor including stationary field windings and stationary armature winding
[NASA-CASE-XGS-07805] c15 N72-33476

Laser measuring system for incremental assemblies --- measuring wire-wrapped frame assemblies in spark chambers
[NASA-CASE-GSC-12321-1] c36 N80-18380

WIRELESS COMMUNICATIONS

Silent alarm system for multiple room facility or school
[NASA-CASE-NFO-11307-1] c10 N73-30205

RF beam center location method and apparatus for power transmission system
[NASA-CASE-NFO-13821-1] c44 N78-28594

WIRING

Acoustic vibration test apparatus for wiring harnesses
[NASA-CASE-MSC-15158-1] c14 N72-17325

Electrical short locator --- identifying shorts occurring while an electrical system is being wired
[NASA-CASE-ARC-11116-1] c33 N79-31498

WOODEN STRUCTURES

Structural wood panels with improved fire resistance
[NASA-CASE-ARC-11174-1] c24 N81-13999

WORDS (LANGUAGE)

Encoders designed to generate comma free biorthogonal Reed-Muller type code comprising conversion of 64 6-bit words into 64 32-bit

data for communication purposes
[NASA-CASE-NPO-10595] c10 N71-25517

Logic circuit for generating multibit binary
code word in parallel
[NASA-CASE-XNP-04623] c10 N71-26103

Digital memory system with multiple switch cores
for driving each word location
[NASA-CASE-XNP-01466] c10 N71-26434

WORK HARDENING
Method of producing complex aluminum alloy parts
of high temper, and products thereof
[NASA-CASE-MSC-19693-1] c26 N78-24333

WORKING FLUIDS
Heat pipe with dual working fluids
[NASA-CASE-ARC-10198] c34 N78-17336

WRENCHES
Ultrasonic wrench for applying vibratory energy
to mechanical fasteners
[NASA-CASE-MFS-20586] c15 N71-17686

System for enhancing tool-exchange capabilities
of a portable wrench
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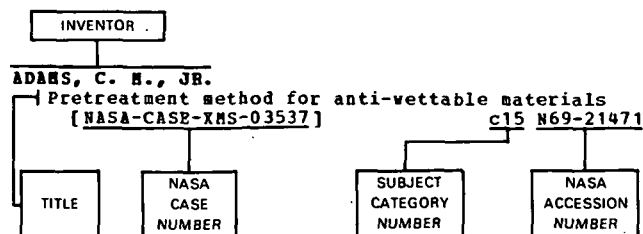
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ARNOLD, G. D.
System for improving signal-to-noise ratio of a communication signal Patent Application
[NASA-CASE-MSC-12259-1] c07 N70-12616

System for improving signal-to-noise ratio of a communication signal
[NASA-CASE-MSC-12259-2] c07 N72-33146

ARRANCE, F. C.
Method of making membranes
[NASA-CASE-XNP-04264] c03 N69-21337

ASHBROOK, R. L.
High temperature cobalt-base alloy Patent
[NASA-CASE-XLE-00726] c17 N71-15644

High temperature cobalt-base alloy Patent
[NASA-CASE-XLE-02991] c17 N71-16025

High temperature ferromagnetic cobalt-base alloy Patent
[NASA-CASE-XLE-03629] c17 N71-23248

Method of forming superalloys
[NASA-CASE-LEW-10805-1] c15 N73-13465

Method of heat treating a formed powder product material
[NASA-CASE-LEW-10805-3] c26 N74-10521

Method of forming articles of manufacture from superalloy powders
[NASA-CASE-LEW-10805-2] c37 N74-13179

ASHWORTH, B. E.
Apparatus for applying simulator g-forces to an arm of an aircraft simulator pilot
[NASA-CASE-LAR-10550-1] c09 N74-30597

Seat cushion to provide realistic acceleration cues to aircraft simulator pilot
[NASA-CASE-LAS-12149-2] c09 N79-31228

Helmet weight simulator
[NASA-CASE-LAR-12320-1] c54 N81-27806

ASKINS, B. S.

Method of obtaining intensified image from developed photographic films and plates
[NASA-CASE-MFS-23461-1] c35 N79-1C389

ASTHEIMER, R. W.

Multi-lobar scan horizon sensor Patent
[NASA-CASE-XGS-0C809] c21 N70-35427

ATKISSON, E. A.

Apparatus having coaxial capacitor structure for measuring fluid density Patent
[NASA-CASE-XLE-00143] c14 N70-36618

AUBLE, C. E.

Instrument for the quantitative measurement of radiation at multiple wave lengths Patent
[NASA-CASE-XLE-00011] c14 N70-41946

AUER, S. O.

Cosmic dust or other similar outer space particles impact location detector
[NASA-CASE-GSC-11291-1] c25 N72-33696

Micrometeoroid analyzer
[NASA-CASE-ARC-10443-1] c14 N73-20477

Impact position detector for outer space particles
[NASA-CASE-GSC-11829-1] c35 N75-27331

Micrometeoroid velocity and trajectory analyzer
[NASA-CASE-GSC-11892-1] c35 N76-15433

Moving particle composition analyzer
[NASA-CASE-GSC-11889-1] c35 N76-16393

Remote sensing of vegetation and soil using microwave ellipsometry
[NASA-CASE-GSC-11976-1] c43 N78-10529

AUXER, B. H.

Refractory porcelain enamel passive control coating for high temperature alloys
[NASA-CASE-MFS-22324-1] c27 N75-27160

AUSTIN, I. G.

Water separator
[NASA-CASE-XMS-01295-1] c37 N79-21345

AUSTIN, R. E.

Compton scatter attenuation gamma ray spectrometer
[NASA-CASE-MFS-21441-1] c14 N73-3C392

AVIZIENIS, A. A.

Self-testing and repairing computer Patent
[NASA-CASE-NPO-10567] c08 N71-24633

AYLWARD, J. R.

Cell and method for electrolysis of water and anode
[NASA-CASE-MSC-16394-1] c28 N81-24280

AYVAZIAN, R. A.

Laminar flow enhancement Patent
[NASA-CASE-NPO-10122] c12 N71-17631

Propellant mass distribution metering apparatus Patent
[NASA-CASE-NPO-10185] c10 N71-26339

B

BABA, P. D.

Method for making conductors for ferrite memory arrays
[NASA-CASE-LAR-1C994-1] c24 N75-13032

BABB, B. D.

Method and apparatus for cryogenic wire stripping Patent
[NASA-CASE-MFS-10340] c15 N71-17628

Self-balancing strain gage transducer Patent
[NASA-CASE-MFS-12827] c14 N71-17656

BABECKI, A. J.

Peen plating
[NASA-CASE-GSC-11163-1] c15 N73-32360

BACCHI, R.

Valve actuator Patent
[NASA-CASE-XHQ-01208] c15 N70-35409

BACHLE, W. H.

Mechanically extendible telescoping boom
[NASA-CASE-NFO-11118] c03 N72-25021

BADIN, P. E.

Space simulation and radiative property testing system and method Patent
[NASA-CASE-MFS-20096] c14 N71-3C026

BAEHR, E. F.

Channel-type shell construction for rocket engines and the like Patent
[NASA-CASE-XLE-00144] c28 N70-34860

Rocket thrust chamber Patent
[NASA-CASE-XLE-00145] c28 N70-36806

Method of making a regeneratively cooled combustion chamber Patent
[NASA-CASE-XLE-00150] c28 N70-41818

Method of making a rocket motor casing Patent
[NASA-CASE-XLE-00409] c28 N71-15658

Rocket motor casing Patent
[NASA-CASE-XLE-05689] c28 N71-15659

Ophthalmic liquifaction pump
[NASA-CASE-LEW-12051-1] c52 N75-33640

Corneal seal device
[NASA-CASE-LEW-12258-1] c52 N77-28716

Tissue macerating instrument
[NASA-CASE-LEW-12668-1] c52 N78-14773

Flow compensating pressure regulator
[NASA-CASE-LEW-12718-1] c34 N78-25351

Intra-ocular pressure normalization technique and equipment
[NASA-CASE-LEW-12955-1] c52 N80-14684

BAER, D. A.

Synchronous orbit battery cyclers
[NASA-CASE-GSC-11211-1] c03 N72-25020

BAGANOFF, D.

Means for controlling rupture of shock tube diaphragms Patent
[NASA-CASE-XAC-00731] c11 N71-15960

BAGBY, J. P.

Thermally operated valve Patent
[NASA-CASE-XLE-00815] c15 N70-35407

BAHMAN, H.

Self-erecting reflector Patent
[NASA-CASE-XGS-09190] c31 N71-16102

Belt for transmitting power from a cogged driving member to a cogged driven member
[NASA-CASE-GSC-12289-1] c37 N80-32717

Unidirectional flexural pivot
[NASA-CASE-GSC-12622-1] c37 N81-22359

BAHN, E. J.

A dc servosystem including an ac motor Patent
[NASA-CASE-NPO-10700] c07 N71-33613

BAILEY, C. L., JR.

Solid state controller three axes controller
[NASA-CASE-MSC-12394-1] c08 N74-10942

BAILEY, D.

Adaptive control system for line-commutated inverters
[NASA-CASE-MFS-25209-1] c33 N81-31480

BAILEY, F. J., JR.

Airplane take-off performance indicator Patent
[NASA-CASE-XLA-00100] c14 N70-36807

BAILEY, G. A.

Magnetic matrix memory system Patent
[NASA-CASE-XMF-05835] c08 N71-12504

BAILEY, J. M.

Bi-polar phase detector and corrector for split phase PCM data signals Patent
[NASA-CASE-XGS-01590] c07 N71-12392

Radio frequency coaxial high pass filter Patent
[NASA-CASE-XGS-01418] c09 N71-23573

Explosively activated egress area
[NASA-CASE-LAE-12624-1] c03 N81-29107

BAILEY, M. C.

Stacked array of omnidirectional antennas
[NASA-CASE-LAR-10545-1] c09 N72-21244

Unequal split microwave power divider
[NASA-CASE-LAR-12889-1] c33 N81-31483

BAILEY, R. L.

Apparatus and method for protecting a photographic device Patent
[NASA-CASE-NPO-10174] c14 N71-16465

Solid propellant rocket motor nozzle
[NASA-CASE-NFO-11458] c28 N72-23810

Electromagnetic wave energy converter
[NASA-CASE-GSC-11394-1] c09 N73-32109

BAKER, C. D.

Coating process
[NASA-CASE-XNP-06508] c18 N69-39895

Electrical spot terminal assembly Patent
[NASA-CASE-NPO-10034] c15 N71-17685

Electrical connector
[NASA-CASE-NPO-10694] c09 N72-20200

Pressure transducer
[NASA-CASE-NFO-10832] c14 N72-21405

BAKER, E. H.

Centrifuge mounted motion simulator Patent
[NASA-CASE-XAC-00399] c11 N70-34815

BAKER, G. J.

Air speed and attitude probe
[NASA-CASE-PRC-11009-1] c06 N80-18036

BAKER, M. E.

Omnidirectional joint Patent
[NASA-CASE-XMS-09635] c05 N71-24623

BAKER, R. L.
Bidirectional step torque filter with zero backlash characteristic Patent
[NASA-CASE-XGS-04227] c15 N71-21744

BAKER, V. D.
Vapor pressure measuring system and method Patent
[NASA-CASE-XMS-01618] c14 N71-20741

BAKSTON, B.
Apparatus for the determination of the existence or non-existence of a bonding between two members Patent
[NASA-CASE-MFS-13686] c15 N71-16132

BALDWIN, L. V.
Particle beam measurement apparatus using beam kinetic energy to change the heat sensitive resistance of the detection probe Patent
[NASA-CASE-XLE-00293] c14 N70-38602
Apparatus for increasing ion engine beam density Patent
[NASA-CASE-XLE-00519] c28 N70-41576

BALES, T. T.
Controlled glass bead peening Patent
[NASA-CASE-XLA-07390] c15 N71-18616

BALLARD, R. E.
Two-axis controller Patent
[NASA-CASE-XFR-04104] c03 N70-42073

BALLENTINE, F. M., JR.
Foam generator Patent
[NASA-CASE-XLA-00838] c03 N70-36778

BALLOU, E. V.
Process for the preparation of calcium superoxide
[NASA-CASE-ARC-11053-1] c25 N79-10162
Use of glow discharge in fluidized beds
[NASA-CASE-ARC-11245-1] c33 N80-11326

BAMFORD, R. E.
Elastic universal joint Patent
[NASA-CASE-XNP-00416] c15 N70-36947
Sealed separable connection Patent
[NASA-CASE-NPO-10064] c15 N71-17693

BANDINI, U.
Out of tolerance warning alarm system for plurality of monitored circuits Patent
[NASA-CASE-XMS-10984-1] c10 N71-19417

BANK, H.
Gas diffusion liquid storage bag and method of use for storing blood
[NASA-CASE-NPO-13930-1] c52 N79-14749

BANKS, B.
Ion beam sputter-etched ventricular catheter for hydrocephalus shunt
[NASA-CASE-LEW-13107-1] c52 N81-27786

BANKS, B. A.
Ion beam deflector Patent
[NASA-CASE-LEW-10689-1] c28 N71-26173
Ion thruster accelerator system Patent
[NASA-CASE-LEW-10106-1] c28 N71-26642
Process for glass coating an ion accelerator grid Patent
[NASA-CASE-LEW-10278-1] c15 N71-26582
Ion thruster magnetic field control
[NASA-CASE-LEW-10835-1] c28 N72-22771
Electromagnetic flow rate meter
[NASA-CASE-LEW-10981-1] c35 N74-21018
Sputtering holes with ion beamlets
[NASA-CASE-LEW-11646-1] c20 N74-31269
Method of making dished ion thruster grids
[NASA-CASE-LEW-11694-1] c20 N75-18310
Apparatus for forming dished ion thruster grids
[NASA-CASE-LEW-11694-2] c37 N76-14461
Method of constructing dished ion thruster grids to provide hole array spacing compensation
[NASA-CASE-LEW-11876-1] c20 N76-21276
Anode for ion thruster
[NASA-CASE-LEW-12048-1] c20 N77-20162
Texturing polymer surfaces by transfer casting
[NASA-CASE-LEW-13120-1] c31 N81-16327
Mechanical bonding of metal
[NASA-CASE-LEW-12941-1] c31 N81-16329

BANKSTON, B. F.
Device for measuring the ferrite content in an austenitic stainless-steel weld
[NASA-CASE-MFS-22907-1] c26 N76-16257

BANTA, R. D.
Positive contact resistance soldering unit
[NASA-CASE-KSC-10242] c15 N72-23497

BARACK, W. E.
Redundant disc
[NASA-CASE-LEW-12496-1] c07 N78-33101

BARBER, J. B.
Laser grating interferometer Patent
[NASA-CASE-XLA-04295] c16 N71-24170

BARBERA, A. J.
Use of unilluminated solar cells as shunt diodes for a solar array
[NASA-CASE-GSC-10344-1] c03 N72-27053

BARGER, R. L.
Continuously operating induction plasma accelerator Patent
[NASA-CASE-XLA-01354] c25 N70-36946

BARISH, B.
Pulsed energy power system Patent
[NASA-CASE-MSC-13112] c03 N71-11057

BARKER, P.
Vibrophonocardiograph Patent
[NASA-CASE-XFR-07172] c05 N71-27234

BARNES, J. R.
Self-calibrating threshold detector
[NASA-CASE-MSC-16370-1] c35 N81-19427

BARNES, P. E.
Can-operated pitch-change apparatus
[NASA-CASE-LEW-13050-1] c07 N79-14095

BARNETT, J. H., JR.
Life raft stabilizer
[NASA-CASE-MSC-12393-1] c02 N73-26006

BARNETT, M. A.
Furlable antenna
[NASA-CASE-NPO-13553-1] c33 N76-32457

BARNISKIS, W. A.
Bus voltage compensation circuit for controlling direct current motor
[NASA-CASE-XMS-04215-1] c09 N69-39987

BARNIS, C. E.
High acceleration cable deployment system
[NASA-CASE-ARC-11256-1] c37 N79-23432

BARRE, T. A.
Thickness measurement system
[NASA-CASE-MFS-23721-1] c31 N79-28370

BARRETT, C. A.
NiCrAl ternary alloy having improved cyclic oxidation resistance
[NASA-CASE-LEW-13339-1] c26 N81-12211

BARRETT, T. W.
Personal propulsion unit Patent
[NASA-CASE-MFS-20130] c28 N71-27585

BARRINGTON, A. E.
Sorption vacuum trap Patent
[NASA-CASE-XER-09519] c14 N71-18483

BARRINGTON, A. E.
Leak detector wherein a probe is monitored with ultraviolet radiation Patent
[NASA-CASE-ERC-10034] c15 N71-24896
Field ionization electrodes Patent
[NASA-CASE-ERC-10013] c09 N71-26678
Ion microprobe mass spectrometer for analyzing fluid materials Patent
[NASA-CASE-ERC-10014] c14 N71-28863
Device for measuring light scattering wherein the measuring beam is successively reflected between a pair of parallel reflectors Patent
[NASA-CASE-XER-11203] c14 N71-28994

BARTERA, R. E.
Indicator providing continuous indication of the presence of a specific pollutant in air
[NASA-CASE-NPO-13474-1] c45 N76-21742
Arc control in compact arc lamps
[NASA-CASE-NPO-10870-1] c33 N77-22386
Multiple anode arc lamp system
[NASA-CASE-NPO-10857-1] c33 N80-14330

BARTHLONE, D. E.
Space suit pressure stabilizer Patent
[NASA-CASE-XLA-05332] c05 N71-11194
Equipotential space suit Patent
[NASA-CASE-LAR-10007-1] c05 N71-11195
Therapeutic hand exerciser
[NASA-CASE-LAR-11667-1] c52 N76-19785
Collapsible corrugated horn antenna
[NASA-CASE-LAR-11745-1] c32 N80-29539

BARZA, M. J.
Application of luciferase assay for ATP to antimicrobial drug susceptibility
[NASA-CASE-GSC-12039-1] c51 N77-22794
Determination of antimicrobial susceptibilities on infected urines without isolation
[NASA-CASE-GSC-12046-1] c52 N79-14750

BASIULIS, A.
Method and apparatus for distillation of liquids Patent

[NASA-CASE-XNP-08124] c15 N71-27184
 Radial heat flux transformer
 [NASA-CASE-NPO-10828] c33 N72-17948
 Method for distillation of liquids
 [NASA-CASE-XNP-08124-2] c06 N73-13129

BASS, A. M.
 Ultraviolet resonance lamp Patent
 [NASA-CASE-ARC-10030] c09 N71-12521
 Ultraviolet atomic emission detector
 [NASA-CASE-HQN-10756-1] c14 N72-25428

BASTIEN, G. J.
 Fluid flow restrictor Patent
 [NASA-CASE-NPO-10117] c15 N71-15608

BATE, E. R., JR.
 Apparatus for establishing flow of a fluid mass
 having a known velocity
 [NASA-CASE-MFS-21424-1] c34 N74-27730

BATES, H. E.
 Segmenting lead telluride-silicon germanium
 thermoelements Patent
 [NASA-CASE-XGS-05718] c26 N71-16037

BATHKER, D. A.
 Dual frequency microwave reflex feed
 [NASA-CASE-NPO-13091-1] c09 N73-12214
 Antenna feed system for receiving circular
 polarization and transmitting linear
 polarization
 [NASA-CASE-NPO-14362-1] c32 N80-16261

BATSCB, F. P.
 Attitude control for spacecraft Patent
 [NASA-CASE-XNP-00294] c21 N70-36938
 Slit regulated gas journal bearing Patent
 [NASA-CASE-XNP-00476] c15 N70-38620

BATTE, W. G.
 Exclusive-Or digital logic module Patent
 [NASA-CASE-XLA-07732] c08 N71-18751

BATTEN, C. E.
 Visible and infrared polarization ratio
 spectrophotometer
 [NASA-CASE-LAR-12285-1] c35 N80-28687

BATTERSON, S. A.
 Runway light Patent
 [NASA-CASE-XLA-00119] c11 N70-33329

BATTS, C. N.
 Contour surveying system Patent
 [NASA-CASE-XLA-08646] c14 N71-17586

BAUCOM, E. M.
 Extensometer frame
 [NASA-CASE-XLA-10322] c15 N72-17452
 Low X-ray absorption aneurism clips
 [NASA-CASE-LAR-12650-1] c52 N81-25768

BAUER, H. B.
 Air conditioning system and component therefore
 distributing air flow from opposite directions
 [NASA-CASE-GSC-11445-1] c31 N74-27902

BAUER, J. L., JR.
 Fiberglass/epoxy composite automotive door
 structure including a glass-reinforced
 intrusion strip
 [NASA-CASE-NPO-15057-1] c24 N81-15230

BAUERNSCHUB, J. P., JR.
 Folding boom assembly Patent
 [NASA-CASE-XGS-00938] c32 N70-41367
 Nonmagnetic, explosive actuated indexing device
 Patent
 [NASA-CASE-XGS-02422] c15 N71-21529

BAUGHMAN, J. R.
 Observation window for a gas confining chamber
 [NASA-CASE-NPO-10890] c11 N73-12265
 Droplet monitoring probe
 [NASA-CASE-NPO-10985] c14 N73-20478

BAUMAN, A. J.
 Solder flux which leaves corrosion-resistant
 coating Patent
 [NASA-CASE-XNP-03459-2] c18 N71-15688
 Soldering with solder flux which leaves
 corrosion resistant coating Patent
 [NASA-CASE-XNP-03459] c15 N71-21078
 Fluid impervious barrier including liquid metal
 alloy and method of making same Patent
 [NASA-CASE-XNP-08881] c17 N71-26747
 Molten salt pyrolysis of latex
 [NASA-CASE-NPO-14315-1] c27 N81-17261

BAUMER, W. E.
 Counter Patent
 [NASA-CASE-XNP-06234] c10 N71-27137

BAXTER, E. D.
 Heat flux measuring system Patent
 [NASA-CASE-XFR-03802] c33 N71-23085

BEALE, H. A.
 Hall effect magnetometer
 [NASA-CASE-LEW-11632-2] c35 N75-13213

BEAM, B. B.
 Thermodielectric radiometer utilizing polymer film
 [NASA-CASE-ARC-10138-1] c14 N72-24477

BEAM, R. A.
 Optical projector system Patent
 [NASA-CASE-XNP-03853] c23 N71-21882

BEAM, B. B.
 Solid medium thermal engine
 [NASA-CASE-ARC-10461-1] c44 N74-33379

BEASLEY, R. M.
 Two-component ceramic coating for silica
 insulation
 [NASA-CASE-MSC-14270-1] c27 N76-22377
 Three-component ceramic coating for silica
 insulation
 [NASA-CASE-MSC-14270-2] c27 N76-23426

BEASLEY, W. D.
 Continuously operating induction plasma
 accelerator Patent
 [NASA-CASE-XLA-01354] c25 N70-36946

BEATTY, E. W.
 Rotary vane attenuator wherein rotor has
 orthogonally disposed resistive and dielectric
 cards
 [NASA-CASE-NFO-11418-1] c14 N73-13420

BEAUREGARD, W. W.
 Water separating system Patent
 [NASA-CASE-XMS-13052] c14 N71-20427

BECK, A. F.
 Small plasma probe Patent
 [NASA-CASE-XLE-02578] c25 N71-20747

BECK, T. E.
 Method of inhibiting stress corrosion cracks in
 titanium alloys Patent
 [NASA-CASE-NFO-10271] c17 N71-16393

BECKER, R. A.
 Photoelectric energy spectrometer Patent
 [NASA-CASE-XNP-04161] c14 N71-15599

BECKERLE, L. D.
 Heat shield oven
 [NASA-CASE-XMS-04318] c15 N69-27871

BECKMAN, P.
 Probes having ring and primary sensor at same
 potential to prevent collection of stray wall
 currents in ionized gases
 [NASA-CASE-XLE-00690] c25 N69-39884

BECKWITH, I. B.
 A rectangular rod-wall sound shield
 [NASA-CASE-LAR-12883-1] c09 N81-29138

BECKWITH, R. B.
 Mechanical coordinate converter Patent
 [NASA-CASE-XNP-00614] c14 N70-36907

BEEBE, J. M.
 Optical tracking mount Patent
 [NASA-CASE-MFS-14017] c14 N71-26627

BEEKMAN, S. W.
 Redundant disc
 [NASA-CASE-LEW-12496-1] c07 N78-33101

BEEH, J. F.
 Method and apparatus for measuring
 electromagnetic radiation
 [NASA-CASE-LEW-11159-1] c14 N73-28488

BREER, R.
 Cooled echelle grating spectrometer
 [NASA-CASE-NPO-14372-1] c35 N80-26635

BEHMER, H.
 High-torque open-end wrench
 [NASA-CASE-NFO-13541-1] c37 N79-14383

BEHN, J. W.
 Solid propellant rocket motor
 [NASA-CASE-NFO-11559] c28 N73-24784

BRITLER, R. S.
 Integrated control system for a gas turbine engine
 [NASA-CASE-LEW-12594-2] c07 N81-19116

BRJCY, A. K.
 Terminal guidance sensor system
 [NASA-CASE-NFO-14521-1] c54 N79-20746
 Terminal guidance sensor system
 [NASA-CASE-NFO-14521-1] c37 N81-27519

BELANGER, R. J.
 Fluid lubricant system Patent
 [NASA-CASE-XNP-03972] c15 N71-23048

BELASCO, B.
 Medical subject monitoring systems
 [NASA-CASE-MSC-14180-1] c52 N76-14757

BELCHER, J. G.
Liquid immersion apparatus for minute articles
[NASA-CASE-MFS-25363-1] c31 N80-32585

BELER, H. W., JR.
Altitude simulation chamber for rocket engine testing
[NASA-CASE-MFS-20620] c11 N72-27262

BELER, R. R.
Thermal compensating structural member
[NASA-CASE-MFS-20433] c15 N72-28496
Docking structure for spacecraft
[NASA-CASE-MFS-20863] c31 N73-26876
Emergency descent device
[NASA-CASE-MFS-23074-1] c54 N77-21844
Electrical rotary joint apparatus for large space structures
[NASA-CASE-MFS-23981-1] c33 N81-19394
Biocentrifuge system capable of exchanging specimen cages while in operational mode
[NASA-CASE-MFS-23825-1] c51 N81-32829

BELL, A.
Process for preparing higher oxides of the alkali and alkaline earth metals
[NASA-CASE-ARC-10992-1] c26 N78-32229

BELL, C. H.
Fiber optic multiplex optical transmission system
[NASA-CASE-KSC-11047-1] c74 N78-14889
Fiber optic crossbar switch for automatically patching optical signals
[NASA-CASE-KSC-11104-1] c74 N81-12862

BELL, D., III
Heated element fluid flow sensor Patent
[NASA-CASE-MSC-12084-1] c12 N71-17569

BELL, V. L.
Polyimide adhesives
[NASA-CASE-LAR-11397-1] c27 N75-29263
Polyimide adhesives
[NASA-CASE-LAR-12181-1] c27 N78-17205
Process for preparing thermoplastic aromatic polyimides
[NASA-CASE-LAR-11828-1] c27 N78-32261

BELL, V. L., JR.
Process for interfacial polymerization of pyromellitic dianhydride and 1,2,4,5-tetraamino-benzene Patent
[NASA-CASE-XLA-03104] c06 N71-11235
Imidazopyrrolone/imide copolymers Patent
[NASA-CASE-XLA-08802] c06 N71-11238
Dosimeter for high levels of absorbed radiation
Patent
[NASA-CASE-XLA-03645] c14 N71-20430

BELLAVIA, J., JR.
Thermal barrier pressure seal
[NASA-CASE-MSC-18134-1] c37 N81-15363

BELLMAN, D. R.
Skin friction measuring device for aircraft
[NASA-CASE-FRC-11029-1] c06 N81-17057

BELT, J. L.
Telephone multiline signaling using common signal pair
[NASA-CASE-KSC-11023-1] c32 N79-23310

BEMENT, L. J.
Linear explosive comparison
[NASA-CASE-LAR-10800-1] c33 N72-27959
Totally confined explosive welding
[NASA-CASE-LAR-10941-1] c37 N74-21057
Method of making an explosively welded scarf joint
[NASA-CASE-LAR-11211-1] c37 N75-12326
Totally confined explosive welding
[NASA-CASE-LAR-10941-2] c37 N79-13364
Explosively activated egress area
[NASA-CASE-LAR-12624-1] c03 N81-29107

BENEDICT, R. D.
Transient augmentation circuit for pulse amplifiers Patent
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BENEDICTO, J. S. J.
Method and apparatus for slicing crystals
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Crystal cleaving machine
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BENGTSON, R. D.
Fast opening diaphragm Patent
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BENHAM, J. W.
Voltage feed through apparatus having reduced partial discharge
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BENIGHT, J. D.
Method and apparatus for precision sizing and joining of large diameter tubes Patent
[NASA-CASE-XMF-05114] c15 N71-17650
Method and apparatus for precision sizing and joining of large diameter tubes Patent
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Method and apparatus for precision sizing and joining of large diameter tubes Patent
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BENZ, H. P.
An image readout device with electrically variable spatial resolution
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BERDAHL, C. M.
Selective image area control of X-ray film exposure density
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Thermal energy transformer
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BERNHARD, D. G.
Direct heating surface combustor
[NASA-CASE-LEW-11877-1] c34 N78-27357
Free-piston regenerative hot gas hydraulic engine
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BERNHARD, G. B.
Method of making fiber composites
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BERG, O. E.
Dust particle injector for hypervelocity accelerators Patent
[NASA-CASE-XGS-06628] c24 N71-16213
Cosmic dust sensor
[NASA-CASE-GSC-10503-1] c14 N72-20381

BERGE, L. H.
Method and apparatus for shaping and enhancing acoustical levitation forces
[NASA-CASE-MFS-25050-1] c71 N81-15767

BERGLUND, R. A.
Erectable modular space station Patent
[NASA-CASE-XLA-00678] c31 N70-34296

BERKMAN, S.
Means for growing ribbon crystals without subjecting the crystals to thermal shock-induced strains
[NASA-CASE-NFO-14298-1] c76 N80-32244
Apparatus for use in the production of ribbon-shaped crystals from a silicon melt
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BERKOPEC, P. D.
Process for preparing liquid metal electrical contact device
[NASA-CASE-LEW-11978-1] c33 N77-26385
Liquid metal slip ring
[NASA-CASE-LEW-12277-2] c33 N78-25323

BERMAN, P. A.
Solar cell grid patterns
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BERNARDIN, R. H.
Measuring device Patent
[NASA-CASE-XMS-01546] c14 N70-40233

BERNATOWICZ, D. T.
Method of making silicon solar cell array
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BERNSEN, B.
Electrical apparatus for detection of thermal decomposition of insulation Patent
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BERNSTEIN, A. J.
Automatic communication signal monitoring system
[NASA-CASE-NFO-13941-1] c32 N79-10262

BERRIER, B. L.
Thrust augmented spin recovery device
[NASA-CASE-LAR-11970-2] c08 N81-19130

BERRY, E. H.
Positive dc to positive dc converter Patent
[NASA-CASE-XMF-14301] c09 N71-23188
Positive dc to negative dc converter Patent
[NASA-CASE-XMF-08217] c03 N71-23239

BESSETTE, R. J.
Space suit
[NASA-CASE-MSC-12609-1] c05 N73-32012

BESWICK, A. G.
Lunar penetrometer Patent
[NASA-CASE-XLA-00934] c14 N71-22765

BEUYUKIAN, C. S.
Tube dimpling tool Patent
[NASA-CASE-XMS-06876] c15 N71-21536

Heat treat fixture and method of heat treating
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BEYLİK, C. M.
Pressure seal Patent
[NASA-CASE-NPO-10796] c15 N71-27068

BHAGAT, P. K.
Apparatus for determining changes in limb volume
[NASA-CASE-MSC-18759-1] c52 N81-24716

BHAT, B. N.
Method of growing composites of the type
exhibiting the Soret effect
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BHIVANDKAR, H. C.
Method for making conductors for ferrite memory
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[NASA-CASE-LAR-10994-1] c24 N75-13032

BIBBO, C.
Flexible seal for valves Patent
[NASA-CASE-XLE-00101] c15 N70-33376

BICKNELL, T. J.
An electro-optical Doppler tracker means and
method for optical correlation of synthetic
aperture radar data
[NASA-CASE-NPO-14998-1] c33 N81-15194

BIEHL, A. J.
Hypervelocity gun
[NASA-CASE-XLE-03186-1] c09 N79-21084

BIENIEK, T.
Metal containing polymers from cyclic tetrameric
phenylphosphonitrilamides Patent
[NASA-CASE-HQN-10364] c06 N71-27363

BIER, M.
Electrophoretic fractional elution apparatus
employing a rotational seal fraction collector
[NASA-CASE-MPS-23284-1] c37 N80-14397

BIKLE, P. F.
System for use in conducting wake investigation
for a wing in flight
[NASA-CASE-FRC-11024-1] c02 N80-28300

BILBRO, J. W.
Focused laser Doppler velocimeter
[NASA-CASE-MPS-23178-1] c35 N77-10493

BILDERBACK, R. R.
Amplitude modulated laser transmitter Patent
[NASA-CASE-XMS-04269] c16 N71-22895

BILES, J. E., JR.
High impact pressure regulator Patent
[NASA-CASE-NPO-10175] c14 N71-18625

BILL, R. C.
Composite seal for turbomachinery
[NASA-CASE-LEW-12131-1] c37 N79-18318

Gas path seal
[NASA-CASE-NPO-12131-3] c37 N80-18400

Fully plasma-sprayed compliant backed ceramic
turbine seal
[NASA-CASE-LEW-13268-1] c37 N80-24619

Composite seal for turbomachinery
[NASA-CASE-LEW-12131-2] c37 N80-26658

Laser surface fusion of plasma sprayed ceramic
turbine seals
[NASA-CASE-LEW-13269-1] c27 N81-22190

Thermal barrier coating system having improved
adhesion
[NASA-CASE-LEW-13359-1] c27 N81-24265

BILLINGHAM, J.
Temperature controller for a fluid cooled garment
[NASA-CASE-ARC-10599-1] c05 N73-26071

BILLINGS, C. B.
Emergency escape system Patent
[NASA-CASE-XKS-07814] c15 N71-27067

BILLINGSLEY, P. C.
Electro-optical scanning apparatus Patent
Application
[NASA-CASE-NPO-11106] c14 N70-34697

Image data rate converter having a drum with a
fixed head and a rotatable head
[NASA-CASE-NPO-11659-1] c35 N74-11283

BILLMAN, K. W.
Method and apparatus for wavelength tuning of
liquid lasers
[NASA-CASE-BRC-10187] c16 N69-31343

Infrared tunable laser
[NASA-CASE-ABC-10463-1] c09 N73-32111

Alignment apparatus using a laser having a
gravitationally sensitive cavity reflector
[NASA-CASE-ABC-10444-1] c16 N73-33397

Measurement of plasma temperature and density
using radiation absorption
[NASA-CASE-ABC-10598-1] c75 N74-30156

BILOW, N.
Thiophenyl ether disiloxanes and trisiloxanes
useful as lubricant fluids
[NASA-CASE-MPS-22411-1] c37 N74-21058

BINCKLEY, W. G.
Voltage regulator with plural parallel power
source sections Patent
[NASA-CASE-GSC-10891-1] c10 N71-26626

BINGHAM, G. J.
Helicopter rotor airfoil
[NASA-CASE-LAR-12396-1] c02 N79-24958

BIRCHENROUGH, A. G.
Switching regulator
[NASA-CASE-LEW-11005-1] c09 N72-21243

Electronic analog divider
[NASA-CASE-LEW-11881-1] c33 N77-17354

Sustained arc ignition system
[NASA-CASE-LEW-12444-1] c33 N77-28385

BIRD, J. D.
Jet shoes
[NASA-CASE-XLA-08491] c05 N69-21380

BISHOP, O. L.
Broadband choke for antenna structure
[NASA-CASE-XMS-05303] c07 N69-27462

BISHOP, R. E.
Optical alignment system Patent
[NASA-CASE-XNP-02029] c14 N70-41955

BLACK, D. B.
Horizontally mounted solar collector
[NASA-CASE-MPS-23349-1] c44 N79-23481

BLACK, I. A.
Apparatus for measuring thermal conductivity
Patent
[NASA-CASE-XGS-01052] c14 N71-15992

BLACK, J. B.
Full wave modulator-demodulator amplifier
apparatus
[NASA-CASE-FRC-10072-1] c33 N74-14939

Window comparator
[NASA-CASE-FRC-10090-1] c33 N78-18308

Voltage regulator for battery power source
[NASA-CASE-FRC-10116-1] c33 N79-23345

Power converter
[NASA-CASE-FRC-11014-1] c33 N79-27395

Active notch filter network with variable notch
depth, width and frequency
[NASA-CASE-FRC-11055-1] c33 N80-29583

BLACK, S. B.
Automatic gain control system
[NASA-CASE-XMS-05307] c09 N69-24330

BLACK, W. W.
Triaxial antenna Patent
[NASA-CASE-XGS-02290] c07 N71-28809

BLACKBAY, J. R.
Temperature controller for a fluid cooled garment
[NASA-CASE-ARC-10599-1] c05 N73-26071

BLACKSTOCK, T. A.
Ferry system
[NASA-CASE-LAR-10574-1] c11 N73-13257

BLAIR, G. B.
Inorganic thermal control pigment Patent
[NASA-CASE-XNP-02139] c18 N71-24184

BLAISE, H. T.
Air cushion lift pad Patent
[NASA-CASE-MPS-14685] c31 N71-15689

Methods and apparatus employing vibratory energy
for wrenching Patent
[NASA-CASE-MPS-20586] c15 N71-17686

Remote manipulator system
[NASA-CASE-MPS-22022-1] c37 N76-15460

BLANCHARD, W. S., JR.
Space capsule Patent
[NASA-CASE-XLA-00149] c31 N70-37938

Space capsule Patent
[NASA-CASE-XLA-01332] c31 N71-15664

Lateral displacement system for separated rocket
stages Patent
[NASA-CASE-XLA-04804] c31 N71-23008

High lift aircraft
[NASA-CASE-LAR-11252-1] c05 N75-25914

BLANCHE, J. F.
Electrical feed-through connection for printed
circuit boards and printed cable
[NASA-CASE-XNP-01483] c14 N69-27431

BLAND, C.
Bacteriostatic conformal coating and methods of
application Patent
[NASA-CASE-GSC-10007] c18 N71-16046

BLAND, W. H., JR.
Survival couch Patent
[NASA-CASE-XLA-00118] c05 N70-33285

BLANKENSHIP, C. P.
Protective device for machine and metalworking tools Patent
[NASA-CASE-XLE-01092] c15 N71-22797
Tantalum modified ferritic iron base alloys
[NASA-CASE-LEW-12095-1] c26 N78-18182

BLAZE, C. J.
Formed metal ribbon wrap Patent
[NASA-CASE-XLE-00164] c15 N70-36411

BLESS, J. J.
Shunt regulation electric power system
[NASA-CASE-GSC-10135] c33 N78-17296

BLOCH, J. T.
Method and apparatus for fabricating improved solar cell modules
[NASA-CASE-NPO-14416-1] c44 N81-14389

BLOOMFIELD, H. S.
In-situ laser retorting of oil shale
[NASA-CASE-LEW-12217-1] c43 N78-14452

BLOSSER, E. B.
Method for determining presence of OH in magnesium oxide
[NASA-CASE-NPO-10774] c06 N72-17095

BLUE, J. W.
Production of high purity I-123
[NASA-CASE-LEW-10518-1] c24 N72-33681
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[NASA-CASE-LEW-11390-2] c25 N76-27383
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[NASA-CASE-LEW-11390-3] c25 N76-29379
Targets for producing high purity I-123
[NASA-CASE-LEW-10518-3] c25 N78-27226

BLUM, P.
Rock sampling
[NASA-CASE-XNP-10007-1] c46 N74-23068
Rock sampling
[NASA-CASE-XNP-09755] c46 N74-23069

BLUME, H. C.
Parametric amplifiers with idler circuit feedback
[NASA-CASE-LAR-10253-1] c09 N72-25258

BLUMRICH, J. F.
Pivotal shock absorbing pad assembly Patent
[NASA-CASE-XMF-03856] c31 N70-34159
Landing pad assembly for aerospace vehicles Patent
[NASA-CASE-XMF-02853] c31 N70-36654
Double-acting shock absorber Patent
[NASA-CASE-XMF-01045] c15 N70-40354
Tank construction for space vehicles Patent
[NASA-CASE-XMF-01899] c31 N70-41948
Docking structure for spacecraft Patent
[NASA-CASE-XMF-05941] c31 N71-23912
Omnidirectional wheel
[NASA-CASE-MFS-21309-1] c37 N74-18125

BLUTINGER, B.
Signal generator
[NASA-CASE-XNP-05612] c09 N69-21468

BLYNILLER, E. B.
Microcircuit negative cutter
[NASA-CASE-XLA-09843] c15 N72-27485

BOATRIGHT, W. B.
Apparatus and method for generating large mass flow of high temperature air at hypersonic speeds
[NASA-CASE-LAR-10578-1] c12 N73-25262

BOCKHOLDT, W. H.
Narrow bandwidth video Patent
[NASA-CASE-XMS-06740-1] c07 N71-26579

BOEDY, D. D.
Power supply circuit Patent
[NASA-CASE-XMS-00913] c10 N71-23543

BOEHM, J.
Gravity device Patent
[NASA-CASE-XMF-00424] c11 N70-38196

BOEHME, B. J.
Electrical rotary joint apparatus for large space structures
[NASA-CASE-MFS-23981-1] c33 N81-19394

BOER, K. W.
High field CdS detector for infrared radiation
[NASA-CASE-LAR-11027-1] c35 N74-18088

BOEX, M. W.
Filter regeneration systems
[NASA-CASE-MSC-14273-1] c34 N75-33342

BOGHEE, B. S.
Storage battery comprising negative plates of a wedge shaped configuration
[NASA-CASE-NPO-11806-1] c44 N74-19693

BOGUSZ, F. J.
Pressure transducer calibrator Patent
[NASA-CASE-XNP-01660] c14 N71-23036

BOIES, R. D.
Instrument for measuring potentials on two dimensional electric field plots Patent
[NASA-CASE-XLA-08493] c10 N71-19421

BOISSEVAIN, A. G.
Optical machine tool alignment indicator Patent
[NASA-CASE-XAC-09489-1] c15 N71-26673

BOLT, C. A., JR.
Broadband choke for antenna structure
[NASA-CASE-XMS-05303] c07 N69-27462

BOLTON, P. B.
Fire extinguishing apparatus having a slidable mass for a penetrator nozzle
[NASA-CASE-KSC-11064-1] c31 N81-14137

BOND, W. W.
Connector internal force gauge Patent
[NASA-CASE-XNP-03918] c14 N71-23087

BONISCH, F. H.
Locking redundant link
[NASA-CASE-LAR-11900-1] c37 N79-14382

BOHN, J. L.
Wire grid forming apparatus Patent
[NASA-CASE-XLE-00023] c15 N70-33330

BONO, P.
Recoverable single stage spacecraft booster Patent
[NASA-CASE-XNP-01973] c31 N70-41588

BOODLEY, L. E.
Connector strips-positive, negative and T tabs
[NASA-CASE-XGS-01395] c03 N69-21539

BOOM, R. W.
Stable superconducting magnet
[NASA-CASE-XNP-05373-1] c33 N79-21264

BOOTH, F. W.
Condenser - Separator
[NASA-CASE-XLA-08645] c15 N69-21465
Separator Patent
[NASA-CASE-XLA-00415] c15 N71-16079
Thermal pump-compressor for space use Patent
[NASA-CASE-XLA-00377] c33 N71-17610
Soldering device Patent
[NASA-CASE-XLA-08911] c15 N71-27214
Air removal device
[NASA-CASE-XLA-8914] c15 N73-12492
Zero gravity liquid mixer
[NASA-CASE-LAR-10195-1] c15 N73-19458
Centrifugal lyophobic separator
[NASA-CASE-LAR-10194-1] c34 N74-36608
Air removal device
[NASA-CASE-XLA-8914-2] c34 N76-23522

BOOTH, R. A.
Solid state switch
[NASA-CASE-XNP-09228] c09 N69-27500

BORELLI, E. T.
Adaptive tracking notch filter system Patent
[NASA-CASE-XMF-01892] c10 N71-22986

BOROSON, H. B.
Wide range linear fluxgate magnetometer Patent
[NASA-CASE-XGS-01587] c14 N71-15962

BOSCO, G. B., JR.
Rotating shaft seal Patent
[NASA-CASE-XNP-02862-1] c15 N71-26294

BOSHERS, W. A.
Battery testing device
[NASA-CASE-MFS-20761-1] c44 N74-27519
Rapid activation and checkout device for batteries
[NASA-CASE-MFS-22749-1] c44 N76-14601
Lead-oxygen dc power supply system having a closed loop oxygen and water system
[NASA-CASE-MFS-23059-1] c44 N76-27664

BOSTON, R. E.
X-Y alphanumeric character generator for oscilloscopes
[NASA-CASE-GSC-11582-1] c33 N75-19517

BOTTOMS, D. J.
Turnstile and flared cone UHF antenna
[NASA-CASE-LAR-10970-1] c33 N76-14372

BOULDIN, D. L.
Multilevel metallization method for fabricating a metal oxide semiconductor device
[NASA-CASE-MFS-23541-1] c76 N79-14906

BOURKE, D. G.
Data compression system with a minimum time delay unit Patent
[NASA-CASE-XNP-08832] c08 N71-12506

BOUSHMAN, W. G.
Hingeless helicopter rotor with improved stability
[NASA-CASE-ARC-10807-1] c05 N77-17029

BOWER, K. F.
Buffered analog converter
[NASA-CASE-KSC-10397] c08 N72-25206

BOXWELL, D. A.
Acoustically swept rotor
[NASA-CASE-ARC-11106-1] c05 N80-14107

BOYLE, J. C.
Balance torque meter Patent
[NASA-CASE-XGS-01013] c14 N71-23725

BOYLE, J. V., JR.
Adjustable attitude guide device Patent
[NASA-CASE-XLA-07911] c15 N71-15571
Canister closing device Patent
[NASA-CASE-XLA-01446] c15 N71-21528

BOZAJIAN, J. M.
Thermal switch Patent
[NASA-CASE-XNP-00463] c33 N70-36847

BOZEK, J. M.
Flexible formulated plastic separators for
alkaline batteries
[NASA-CASE-LEW-12363-4] c44 N80-18555

BRADFIELD, S. P., III
Unbalanced quadriphase demodulator
[NASA-CASE-MSC-14840-1] c32 N77-24331

BRADLEY, R. H.
Emergency earth orbital escape device
[NASA-CASE-MSC-13281] c31 N72-18859
A method of delivering a vehicle to earth orbit
and returning the reusable portion thereof to
earth
[NASA-CASE-MSC-12391] c30 N73-12884

BRADY, J. C.
Surface roughness detector Patent
[NASA-CASE-XLA-00203] c14 N70-34161

BRAINARD, W. A.
Improved refractory coatings and method of
producing the same
[NASA-CASE-LEW-13169-1] c26 N80-14232
Improved refractory coatings
[NASA-CASE-LEW-23169-2] c26 N81-16209

BRANDHORST, H. W., JR.
Rapidly pulsed, high intensity, incoherent light
source
[NASA-CASE-XLE-2529-3] c33 N74-20859
High power laser apparatus and system
[NASA-CASE-XLE-2529-2] c36 N75-27364
Solar cell assembly
[NASA-CASE-LEW-11549-1] c44 N77-19571
Application of semiconductor diffusants to solar
cells by screen printing
[NASA-CASE-LEW-12775-1] c44 N79-11468
Back wall solar cell
[NASA-CASE-LEW-12236-2] c44 N79-14528

BRANDON, C. A.
Method of forming dynamic membrane on stainless
steel support
[NASA-CASE-MSC-18172-1] c26 N80-15237

BRANSTETTER, J. R.
Black-body furnace Patent
[NASA-CASE-XLE-01399] c33 N71-15625

BRANTLEY, J. W.
Leading edge protection for composite blades
[NASA-CASE-LEW-12550-1] c24 N77-19170

BRANTLEY, L. W., JR.
Solar energy absorber
[NASA-CASE-MFS-22743-1] c44 N76-22657
Solar energy trap
[NASA-CASE-MFS-22744-1] c44 N76-24696
Thermal energy storage system
[NASA-CASE-MFS-23167-1] c44 N76-31667
Mount for continuously orienting a collector
dish in a system adapted to perform both
diurnal and seasonal solar tracking
[NASA-CASE-MFS-23267-1] c35 N77-20401

BRASCHWITZ, J. M.
External liquid-spray cooling of turbine blades
Patent
[NASA-CASE-XLE-00037] c28 N70-33372

BRAUN, W.
Ultraviolet atomic emission detector
[NASA-CASE-HQB-10756-1] c14 N72-25428

BRAWNER, C. C.
Specific wavelength colorimeter
[NASA-CASE-MSC-14081-1] c35 N74-27860

BRAWNER, E. L.
Color perception tester
[NASA-CASE-KSC-10278] c05 N72-16015

BREALT, B. F.
System for the measurement of ultra-low stray
light levels
[NASA-CASE-MFS-23513-1] c74 N79-11865

BREAZEALE, E. A.
Liquid-immersible electrostatic ultrasonic
transducer
[NASA-CASE-LAR-12465-1] c35 N80-18363

BRECKENRIDGE, E. A.
Vapor phase growth of groups 3-5 compounds by
hydrogen chloride transport of the elements
[NASA-CASE-LAR-11144-1] c25 N75-26043
Magnetometer with a miniature transducer and
automatic scanning
[NASA-CASE-LAR-11617-2] c35 N78-32397

BRECKENRIDGE, J. B.
Interferometer
[NASA-CASE-NFO-14502-1] c74 N81-17888
Interferometer
[NASA-CASE-NFO-14448-1] c74 N81-29963

BREED, L. L.
Fluorinated esters of polycarboxylic acids
[NASA-CASE-MFS-21040-1] c06 N73-30098

BREED, L. W.
Preparation of ordered poly /arylenesiloxane/
polymers
[NASA-CASE-XMP-10753] c06 N71-11237

BREEZE, B. K.
Method and system for respiration analysis Patent
[NASA-CASE-XPR-08403] c05 N71-11202

BREGMAN, B. J.
Derivation of a tangent function using an
integrated circuit four-quadrant multiplier
[NASA-CASE-MSC-13907-1] c10 N73-26230

BREITWIESER, B.
High current electrical lead
[NASA-CASE-LEW-10950-1] c33 N74-27683

BREJCHA, A. G., JR.
Coaxial cable connector Patent
[NASA-CASE-XNP-04732] c09 N71-20851

BRESHEARS, E. E.
Plasma igniter for internal combustion engine
[NASA-CASE-NFO-13828-1] c37 N79-11405

BREUER, D. E.
Temperature compensated current source
[NASA-CASE-MSC-11235] c33 N78-17294

BREY, H.
Frequency division multiplex technique
[NASA-CASE-KSC-10521] c07 N73-20176
FM/CW radar system
[NASA-CASE-MFS-22234-1] c32 N79-10264

BRICKER, R. W.
Mass measuring system Patent
[NASA-CASE-XMS-03371] c05 N70-42000

BRIGHT, C. W.
Prosthesis coupling
[NASA-CASE-KSC-11069-1] c52 N79-26772

BRINICH, P. F.
Electrothermal rockets having improved heat
exchangers Patent
[NASA-CASE-XLE-01783] c28 N70-34175

BRINKS, B. J.
Plating nickel on aluminum castings Patent
[NASA-CASE-XNP-04148] c17 N71-24830

BRISKEN, A. F.
Automatic transponder
[NASA-CASE-GSC-12075-1] c32 N77-31350

BRISSENDEN, B. F.
Cable arrangement for rigid tethering Patent
[NASA-CASE-XLA-02332] c32 N71-17609

BRITT, T. O.
Remote lightning monitor system
[NASA-CASE-KSC-11031-1] c33 N79-11315

BRITZ, W. J.
Rapid activation and checkout device for batteries
[NASA-CASE-MFS-22749-1] c44 N76-14601
Lead-oxygen dc power supply system having a
closed loop oxygen and water system
[NASA-CASE-MFS-23059-1] c44 N76-27664

BROCK, F. J.
Gauge calibration by diffusion
[NASA-CASE-XGS-07752] c14 N73-30390
Ultrahigh vacuum measuring ionization gauge
[NASA-CASE-XLA-05087] c14 N73-30391

BROCKMAN, H. H.
Charge storage diode modulators and demodulators
[NASA-CASE-NFO-10189-1] c33 N77-21314

- Faraday rotation measurement method and apparatus
[NASA-CASE-NPO-14839-1] c35 N80-16313
Radio frequency arraying method for receivers
[NASA-CASE-NPO-14328-1] c32 N80-18253
- BRODER, J. D.
Method of making electrical contact on silicon solar cell and resultant product Patent
[NASA-CASE-XLE-04787] c03 N71-20492
Method of making silicon solar cell array
[NASA-CASE-LEW-11069-1] c44 N74-14784
Covered silicon solar cells and method of manufacture
[NASA-CASE-LEW-11065-2] c44 N76-14600
Silicon nitride coated, plastic covered solar cell
[NASA-CASE-LEW-11496-1] c44 N77-14580
- BRODERICK, J. C.
Solid state television camera system Patent
[NASA-CASE-XMF-06092] c07 N71-24612
- BRODERICK, R. P.
Signal ratio system utilizing voltage controlled oscillators Patent
[NASA-CASE-XMF-04367] c09 N71-23545
Radar antenna system for acquisition and tracking Patent
[NASA-CASE-XMS-09610] c07 N71-24625
- BRODIE, S. B.
Variable ratio mixed-mode bilateral master-slave control system for shuttle remote manipulator system
[NASA-CASE-MSC-14245-1] c18 N75-27041
- BROKL, S. S.
Numerical computer peripheral interactive device with manual controls
[NASA-CASE-NPO-11497] c08 N73-25206
- BROMAN, C. L.
Dual output variable pitch turbofan actuation system
[NASA-CASE-LEW-12419-1] c07 N77-14025
- BROOKS, A. D.
Particulate and aerosol detector
[NASA-CASE-LAR-11434-1] c35 N76-22509
- BROOKS, D. E.
Method for separating biological cells
[NASA-CASE-MPS-23883-1] c51 N80-16715
- BROOKS, G. W.
Impact simulator Patent
[NASA-CASE-XLA-00493] c11 N70-34786
Flexible ring slosh damping baffle Patent
[NASA-CASE-LAR-10317-1] c32 N71-16103
Lunar penetrometer Patent
[NASA-CASE-XLA-00934] c14 N71-22765
- BROOKS, J. D.
Continuously operating induction plasma accelerator Patent
[NASA-CASE-XLA-01354] c25 N70-36946
- BROOKS, R. A.
Capacitive tank gaging apparatus being independent of liquid distribution
[NASA-CASE-MPS-21629] c14 N72-22442
- BROOKS, R. L.
Fluid sample collection and distribution system
[NASA-CASE-MSC-16841-1] c34 N79-24285
- BROOKS, W. F.
Refrigerator module, system and process
[NASA-CASE-ARC-11263-1] c31 N81-27328
- BROSH, A.
Flow separation detector
[NASA-CASE-ARC-11046-1] c35 N76-14364
- BROUSSARD, P. H.
Coal-shale interface detection
[NASA-CASE-MPS-23720-3] c43 N79-25443
- BROUSSARD, R.
Optical tracking mount Patent
[NASA-CASE-MPS-14017] c14 N71-26627
- BROWN, C. E.
G conditioning suit Patent
[NASA-CASE-XLA-02898] c05 N71-20268
- BROWN, D.
Radial module space station Patent
[NASA-CASE-XMS-01906] c31 N70-41373
- BROWN, D. W.
Phase-locked loop with sideband rejecting properties Patent
[NASA-CASE-XMF-02723] c07 N70-41680
- BROWN, E. L.
Sprayable low density ablator and application process
[NASA-CASE-MPS-23506-1] c24 N78-24290
- BROWN, G. A.
Integrated circuit including field effect transistor and cermet resistor
[NASA-CASE-GSC-10835-1] c09 N72-33205
- BROWN, G. V.
Method of fabricating a twisted composite superconductor
[NASA-CASE-LEW-11015] c26 N73-32571
Magnetocaloric pump
[NASA-CASE-LEW-11672-1] c37 N74-27904
Magnetic heat pumping
[NASA-CASE-LEW-12508-1] c34 N78-17335
- BROWN, H. H.
Reaction tester
[NASA-CASE-MSC-13604-1] c05 N73-13114
- BROWN, J. W.
Reduced gravity fecal collector seat and urinal
[NASA-CASE-MPS-22102-1] c54 N74-20725
- BROWN, K. H.
Phase modulator Patent
[NASA-CASE-MSC-13201-1] c07 N71-28429
- BROWN, N. D.
Deployable flexible tunnel
[NASA-CASE-MPS-22636-1] c37 N76-22540
- BROWN, P. A.
Indomethacin-antihistamine combination for gastric ulceration control
[NASA-CASE-ARC-11118-2] c52 N81-14613
Indomethacin-antihistamine combination for gastric ulceration control
[NASA-CASE-ARC-11118-1] c52 N81-29764
- BROWN, R. H.
Variable mixer propulsion cycle
[NASA-CASE-LEW-12917-1] c07 N78-18067
- BROWN, R. L.
Gimbaled, partially submerged rocket nozzle Patent
[NASA-CASE-XMF-01544] c28 N70-34162
- BROWN, R. H.
Multiple pass reimaging optical system
[NASA-CASE-ARC-10194-1] c23 N73-20741
- BROWN, W. E., III
Method and means for providing an absolute power measurement capability Patent
[NASA-CASE-ERC-11020] c14 N71-26774
Clear air turbulence detector
[NASA-CASE-ERC-10081] c14 N72-28437
Method and apparatus for measuring solar activity and atmospheric radiation effects
[NASA-CASE-ERC-10276] c14 N73-26432
- BROWNING, R. E.
Flexible seal for valves Patent
[NASA-CASE-XLE-00101] c15 N70-33376
- BROYLES, H. P.
Parallel plate viscometer Patent
[NASA-CASE-XNP-09462] c14 N71-17584
Method of making hollow elastomeric bodies
[NASA-CASE-NFO-13535-1] c37 N76-31524
- BROYLES, H. H.
Parallel plate viscometer Patent
[NASA-CASE-XNP-09462] c14 N71-17584
- BRUCE, M. H., JR.
Computerized system for translating a torch head
[NASA-CASE-MPS-23620-1] c37 N79-10421
- BRUCE, R. A.
Specialized halogen generator for purification of water Patent
[NASA-CASE-XLA-08913] c14 N71-28933
Air removal device
[NASA-CASE-XLA-8914] c15 N73-12492
Zero gravity liquid mixer
[NASA-CASE-LAR-10195-1] c15 N73-19458
Centrifugal lyophobic separator
[NASA-CASE-LAR-10194-1] c34 N74-30608
Air removal device
[NASA-CASE-XLA-8914-2] c34 N76-23522
- BRUNSON, J. W.
Decommutator patchboard verifier
[NASA-CASE-KSC-11065-1] c33 N81-26359
- BRUNSTEIN, S. A.
Dual frequency microwave reflex feed
[NASA-CASE-NPO-13091-1] c09 N73-12214
- BRYAN, C. J.
Autoignition test cell Patent
[NASA-CASE-KSC-10198] c11 N71-28629
System for sterilizing objects
[NASA-CASE-KSC-11085-1] c54 N81-24724
- BRYAN, H. B.
Wind tunnel model damper Patent
[NASA-CASE-XLA-09480] c11 N71-33612

BRYANT, E. L.
 Fatigue testing device Patent
 [NASA-CASE-XLA-02131] c32 N70-42003
 Noncontacting method for measuring angular
 deflection
 [NASA-CASE-LAR-12178-1] c74 N80-21138

BRYANT, W. H.
 Digital controller for a Baum folding machine
 [NASA-CASE-LAR-10688-1] c37 N74-21056

BRISON, R. P.
 Soil penetrometer
 [NASA-CASE-XNF-05530] c14 N73-32321

BUBE, K. E.
 Solar cell with improved N-region contact and
 method of forming the same
 [NASA-CASE-NPO-14205-1] c44 N79-31752

BUCHANAN, R. I.
 Hypersonic test facility Patent
 [NASA-CASE-XLA-00378] c11 N71-15925
 Hypersonic test facility Patent
 [NASA-CASE-XLA-05378] c11 N71-21475

BUCHHELE, D. R.
 Optical torque meter Patent
 [NASA-CASE-XLE-00503] c14 N70-34818

BUCHHOLD, T. A.
 Superconductive accelerometer Patent
 [NASA-CASE-XMF-01099] c14 N71-15969

BUCHMILLER, L. D.
 Folded traveling wave maser structure Patent
 [NASA-CASE-XNF-05219] c16 N71-15550

BUCKLEY, D. H.
 Gas lubricant compositions Patent
 [NASA-CASE-XLE-00353] c18 N70-35897
 Metallic film diffusion for boundary lubrication
 Patent
 [NASA-CASE-XLE-01765] c18 N71-10772
 Alloys for bearings Patent
 [NASA-CASE-XLE-05033] c15 N71-23610
 Metallic film diffusion for boundary lubrication
 Patent
 [NASA-CASE-XLE-10337] c15 N71-24046

BUCKLEY, J. D.
 Induction heating gun
 [NASA-CASE-LAR-12540-1] c37 N80-11468
 One step dual purpose joining technique
 [NASA-CASE-LAR-12595-1] c37 N80-11469

BUHLER, G. V.
 Meter for use in detecting tension in straps
 having predetermined elastic characteristics
 [NASA-CASE-NFS-22189-1] c35 N75-19615

BULLINGER, H. B.
 Photoetching of metal-oxide layers
 [NASA-CASE-ERC-10108] c06 N72-21094

BUNCE, R. C.
 Closed loop ranging system Patent
 [NASA-CASE-XNF-01501] c21 N70-41930
 Automatic carrier acquisition system
 [NASA-CASE-NPO-11628-1] c07 N73-30113

BUNKER, E. R., JR.
 Automated equipotential plotter
 [NASA-CASE-NPO-11134] c09 N72-21246

BURCH, C. P.
 Grinding arrangement for ball nose milling cutters
 [NASA-CASE-LAR-10450-1] c37 N74-27905

BURCH, J. L.
 Two speed drive system
 [NASA-CASE-MFS-20645-1] c37 N74-23070
 Automatically operable self-leveling load table
 [NASA-CASE-MFS-22039-1] c09 N75-12968
 Actuator device for artificial leg
 [NASA-CASE-MFS-23225-1] c52 N77-14735
 Combined docking and grasping device
 [NASA-CASE-MFS-23088-1] c37 N77-23483
 Apparatus for assembling space structure
 [NASA-CASE-MFS-23579-1] c18 N79-11108
 Coal-shale interface detection
 [NASA-CASE-MFS-23720-3] c43 N79-25443

BURCHAM, F. W., JR.
 Multiple pure tone elimination strut assembly
 [NASA-CASE-FRC-11062-1] c07 N80-32393

BURCHAM, T. W.
 Controlled release device Patent
 [NASA-CASE-XKS-03338] c15 N71-24043

BURCHER, E. E.
 Laser communication system for controlling
 several functions at a location remote to the
 laser
 [NASA-CASE-LAR-10311-1] c16 N73-16536

Transmitting and reflecting diffuser
 [NASA-CASE-LAR-10385-2] c70 N74-13436
 Automatic focus control for facsimile cameras
 [NASA-CASE-LAR-11213-1] c35 N75-15014
 Spectrometer integrated with a facsimile camera
 [NASA-CASE-LAR-11207-1] c35 N75-19613
 Transmitting and reflecting diffuser
 [NASA-CASE-LAR-10385-3] c74 N78-15879
 Device for measuring the contour of a surface
 [NASA-CASE-LAR-11869-1] c74 N78-27904

BURDIN, C.
 Phase-locked servo system
 [NASA-CASE-MFS-22073-1] c33 N75-13139

BURGETT, F. A.
 Measuring device Patent
 [NASA-CASE-XMS-01546] c14 N70-40233
 Process for conditioning tanned sharkskin and
 articles made therefrom Patent
 [NASA-CASE-XMS-09691-1] c18 N71-15545

BURK, S. R., JR.
 Deployable flexible ventral fins for use as an
 emergency spin recovery device in aircraft
 [NASA-CASE-LAR-10753-1] c08 N74-30421

BURKE, J. R.
 Optical spin compensator
 [NASA-CASE-XGS-02401] c14 N69-27485

BURKHART, J. A.
 Magneto-plasma-dynamic arc thruster
 [NASA-CASE-LEW-11180-1] c25 N73-25760

BURKLEY, R. A.
 Panelized high performance multilayer insulation
 Patent
 [NASA-CASE-MFS-14023] c33 N71-25351

BURKS, R. R., JR.
 Infusible silazane polymer and process for
 producing same
 [NASA-CASE-XMF-02526-1] c27 N79-21190

BURNETT, J. E.
 Tissue macerating instrument
 [NASA-CASE-LEW-12668-1] c52 N78-14773

BURNHAM, D. C.
 Method and apparatus for wavelength tuning of
 liquid lasers
 [NASA-CASE-ERC-10187] c16 N69-31343

BURNS, E. A.
 Ablative resin Patent
 [NASA-CASE-XLE-05913] c33 N71-14032
 Reinforced structural plastics
 [NASA-CASE-LEW-10199-1] c27 N74-23125

BURNS, F. P.
 Bionedical radiation detecting probe Patent
 [NASA-CASE-XMS-01177] c05 N71-19440

BURNS, R. H.
 High pulse rate high resolution optical radar
 system
 [NASA-CASE-NPO-11426] c07 N73-26119

BURNS, R. E.
 Protected isotope heat source
 [NASA-CASE-LEW-11227-1] c73 N75-30876

BURROUS, C. H.
 Temperature compensated light source using a
 light emitting diode
 [NASA-CASE-ARC-10467-1] c09 N73-14214

BURROWS, D. L.
 Insulating structure Patent
 [NASA-CASE-XMF-00341] c15 N70-33323

BURTON, D. B.
 Garments for controlling the temperature of the
 body Patent
 [NASA-CASE-XMS-10269] c05 N71-24147

BURTON, W. A.
 Endless tape cartridge Patent
 [NASA-CASE-XGS-00769] c14 N70-41647
 Annular slit colloid thruster Patent
 [NASA-CASE-GSC-10709-1] c28 N71-25213

BUSEMANN, A.
 Plasma accelerator Patent
 [NASA-CASE-XLA-00675] c25 N70-33267

BUSH, E. G.
 Vacuum pressure molding technique
 [NASA-CASE-LAR-10073-1] c37 N76-24575
 Mechanical end joint system for structural
 column elements
 [NASA-CASE-LAR-12482-1] c37 N80-22704
 Lightweight structural columns
 [NASA-CASE-LAR-12095-1] c31 N81-25258

BUTLER, D. B.
 Miniature vibration isolator Patent
 [NASA-CASE-XLA-01019] c15 N70-40156

Radio frequency filter device
[NASA-CASE-XLA-02609] c09 N72-25256

BUTLER, J. M.
Tackifier for addition polyimides containing
monoethylphthalate
[NASA-CASE-LAR-12642-1] c27 N81-25229

BUTMAN, S.
Signal phase estimator
[NASA-CASE-NPO-11203] c10 N72-20224
Multichannel telemetry system
[NASA-CASE-NPO-11572] c07 N73-16121
Receiver with an improved phase lock loop in a
multichannel telemetry system with suppressed
carrier
[NASA-CASE-NPO-11593-1] c07 N73-28012

BUTMAN, S. A.
Multiple rate digital command detection system
with range clean-up capability
[NASA-CASE-NPO-13753-1] c32 N77-20289

BUZZARD, R. J.
Radial heat flux transformer
[NASA-CASE-NPO-10828] c33 N72-17948

BYERS, D. C.
Electrostatic thruster with improved insulators
Patent
[NASA-CASE-XLE-01902] c28 N71-10574
Sputtering holes with ion beamlets
[NASA-CASE-LEW-11646-1] c20 N74-31269

BYNUM, B. G.
Response analyzers for sensors Patent
[NASA-CASE-MFS-11204] c14 N71-29134
Ergometer
[NASA-CASE-MFS-21109-1] c05 N73-27941

BYRD, A. W.
Heat pipe thermionic diode power system Patent
[NASA-CASE-XMF-05843] c03 N71-11055
Power system with heat pipe liquid coolant lines
Patent
[NASA-CASE-MFS-14114-2] c09 N71-24607
Isothermal cover with thermal reservoirs Patent
[NASA-CASE-MFS-20355] c33 N71-25353
Power system with heat pipe liquid coolant lines
Patent
[NASA-CASE-MFS-14114] c33 N71-27862
Thermoelectric power system
[NASA-CASE-MFS-22002-1] c44 N76-16612

BYRD, J. D.
Elastomeric silazane polymers and process for
preparing the same Patent
[NASA-CASE-XMF-04133] c06 N71-20717

BYRD, R. E.
Thermally conductive polymers
[NASA-CASE-GSC-11304-1] c06 N72-21105

BYRNE, P.
BCD to decimal decoder Patent
[NASA-CASE-XKS-06167] c08 N71-24890
Video sync processor Patent
[NASA-CASE-KSC-10002] c10 N71-25865
Automatic frequency control loop including
synchronous switching circuits
[NASA-CASE-KSC-10393] c09 N72-21247
Digital servo controller
[NASA-CASE-KSC-10769-1] c33 N74-29556
Common data buffer system
[NASA-CASE-KSC-11048-1] c62 N81-24779

C

CABLE, C. W.
Solar cell assembly test method
[NASA-CASE-NPO-10401] c03 N72-20033

CABLE, W. L.
Rotary solenoid shutter drive assembly and
rotary inertia damper and stop plate assembly
[NASA-CASE-GSC-11560-1] c33 N74-20861

CACOSSA, R. A.
Method of detecting impending saturation of
magnetic cores
[NASA-CASE-ERC-10089] c23 N72-17747

CAGLIOSTRO, D. E.
Method of carbonizing polyacrylonitrile fibers
and resulting product
[NASA-CASE-ARC-11261-1] c24 N81-29164

CARILL, K. J.
Catalyst surfaces for the chromous/chromic redox
couple
[NASA-CASE-LEW-13148-1] c33 N80-20487
Catalyst surfaces for the chromous/chromic redox
couple

[NASA-CASE-LEW-13148-2] c44 N81-29524

CAHILL, R. E.
Positive locking check valve Patent
[NASA-CASE-XMS-09310] c15 N71-22706

CAIRO, F. J.
Bonding machine for forming a solar array strip
[NASA-CASE-NFO-13652-2] c44 N79-24431

CALANDRO, J. E.
Resilient wheel Patent
[NASA-CASE-MFS-13929] c15 N71-27091

CALLAHAN, D. E.
Solid state television camera system Patent
[NASA-CASE-XMF-06092] c07 N71-24612

CALVERT, R. F.
Modification and improvements to cooled blades
Patent
[NASA-CASE-XLE-00092] c15 N70-33264

CALVERT, J. A.
Redundant motor drive system
[NASA-CASE-MFS-23777-1] c37 N80-32716

CAMACHO, S. L.
Protective circuit of the spark gap type
[NASA-CASE-XAC-08981] c09 N69-39897

CAMARDA, C. J.
Heat pipe honeycomb panel
[NASA-CASE-LAR-12637-1] c34 N81-12362
Heat pipe cooled probe
[NASA-CASE-LAR-12588-1] c44 N81-24525

CAMERA, J. E.
Overvoltage protection network
[NASA-CASE-ARC-10197-1] c33 N74-17929

CAMERON, J. E.
Method and system for in vivo measurement of
bone tissue using a two level energy source
[NASA-CASE-MSC-14276-1] c52 N77-14737

CAMP, D. W.
Anemometer with braking mechanism Patent
[NASA-CASE-XMF-05224] c14 N71-23726
Maxometers (peak wind speed anemometers)
[NASA-CASE-MFS-20916] c14 N73-25460

CAMP, E. L.
Automatic signal range selector for metering
devices Patent
[NASA-CASE-XMS-06497] c14 N71-26244

CAMPBELL, B. A.
Epoxy-aziridine polymer product Patent
[NASA-CASE-NPO-10701] c06 N71-28620

CAMPBELL, C. C., JR.
Discrete local altitude sensing device Patent
[NASA-CASE-XMS-03792] c14 N70-41812

CAMPBELL, C. W.
Collimated beam manifold and method for using
the same
[NASA-CASE-MFS-25312-1] c74 N80-34251

CAMPBELL, D. E.
Method of making a rocket nozzle
[NASA-CASE-XMF-06884-1] c20 N79-21123

CAMPBELL, D. E.
Time division radio relay synchronizing system
using different sync code words for in sync
and out of sync conditions Patent
[NASA-CASE-GSC-10373-1] c07 N71-19773

CAMPBELL, P. D.
Radiant source tracker independent of
nonconstant irradiance
[NASA-CASE-NFO-11686] c14 N73-25462

CAMPBELL, G. E.
Self-recording portable soil penetrometer
[NASA-CASE-MFS-20774] c14 N73-19420

CAMPBELL, G. W.
Method and system for respiration analysis Patent
[NASA-CASE-XFR-08403] c05 N71-11202

CAMPBELL, J. G.
Multislit film cooled pyrolytic graphite rocket
nozzle Patent
[NASA-CASE-XMF-04389] c28 N71-20942
Tube sealing device Patent
[NASA-CASE-NPO-10431] c15 N71-29132

CAMPBELL, R. A.
Redundant hydraulic control system for actuators
[NASA-CASE-MFS-20944] c15 N73-13466
Contour measurement system
[NASA-CASE-MFS-23726-1] c43 N79-26439
Coal-shale interface detection system
[NASA-CASE-MFS-23720-2] c43 N80-14423

CAMPBELL, R. B., JR.
Focused laser Doppler velocimeter
[NASA-CASE-MFS-23178-1] c35 N77-10493

CAMPBELL, T. G.
Omnidirectional slot antenna for mounting on cylindrical space vehicle
[NASA-CASE-LAR-10163-1] c09 N72-25247

CAMPEN, C. F., JR.
Automated system for identifying traces of organic chemical compounds in aqueous solutions
[NASA-CASE-NPO-13063-1] c25 N76-18245

CANCRO, C. A.
Low power drain semi-conductor circuit
[NASA-CASE-XGS-04999] c09 N69-24317
Wide range data compression system Patent
[NASA-CASE-XGS-02612] c08 N71-15435
Passive synchronized spike generator with high input impedance and low output impedance and capacitor power supply Patent
[NASA-CASE-XGS-03632] c09 N71-23311
Fast response low power drain logic circuits
[NASA-CASE-GSC-10878-1] c10 N72-22236

CANICATTI, C. L.
Voltage monitoring system
[NASA-CASE-KSC-10736-1] c33 N75-19521

CANNING, T. N.
Shock-layer radiation measurement
[NASA-CASE-XAC-02970] c14 N69-35896
Hypervelocity gun Patent
[NASA-CASE-XAC-05902] c11 N71-18578
Heater-mixer for stored fluids
[NASA-CASE-ARC-10442-1] c35 N74-15093
Bimetallic fluid displacement apparatus
[NASA-CASE-ARC-10441-1] c35 N74-15126
High acceleration cable deployment system
[NASA-CASE-ARC-11256-1] c37 N79-23432

CANTOR, C.
Attitude control system Patent
[NASA-CASE-XGS-04393] c21 N71-14159
Amplifier clamping circuit for horizon scanner Patent
[NASA-CASE-XGS-01784] c10 N71-20782
Roll alignment detector
[NASA-CASE-GSC-10514-1] c14 N72-20379

CANTRELL, J. B., JR.
Liquid-immersible electrostatic ultrasonic transducer
[NASA-CASE-LAR-12465-1] c35 N80-18363
Frequency tracked pulse technique for ultrasonic analysis
[NASA-CASE-LAR-12697-1] c32 N80-26571

CANVEL, H.
Video communication system and apparatus Patent
[NASA-CASE-XNP-06611] c07 N71-26102

CAPLETTE, R. K.
Current steering commutator
[NASA-CASE-NPO-10743] c08 N72-21199

CAPPS, J. B.
Two-step rocket engine bipropellant valve Patent
[NASA-CASE-XMS-04890-1] c15 N70-22192

CAREB, R. P.
Dual solid cryogenics for spacecraft refrigeration Patent
[NASA-CASE-GSC-10188-1] c23 N71-24725

CARL, C.
Apparatus for deriving synchronizing pulses from pulses in a single channel PCM communications system
[NASA-CASE-NPO-11302-1] c07 N73-13149
Method and apparatus for a single channel digital communications system
[NASA-CASE-NPO-11302-2] c32 N74-1C132
Digital second-order phase-locked loop
[NASA-CASE-NPO-11905-1] c33 N74-12887

CARL, G. B.
Air conditioned suit
[NASA-CASE-LAR-10076-1] c05 N73-20137

CARLE, C. B.
Reel safety brake
[NASA-CASE-GSC-11960-1] c37 N77-14479

CARLISLE, T. B.
Method and apparatus for controllably heating fluid Patent
[NASA-CASE-XMF-04237] c33 N71-16278

CARLSON, A. W.
Pulse-width modulation multiplier Patent
[NASA-CASE-XER-09213] c07 N71-12390

CARLSON, H. W.
Supersonic aircraft Patent
[NASA-CASE-XLA-04451] c02 N71-12243

CARLSON, R. L.
Flow diverter valve and flow diversion method
[NASA-CASE-HQN-00573-1] c37 N79-33468

CARLSON, W. C. A.
Electric arc device for heating gases Patent
[NASA-CASE-XAC-00319] c25 N70-41628

CARMIN, D. L., JR.
Anti-fog composition
[NASA-CASE-MSC-13530-2] c23 N75-14834

CARMODY, R. J.
Honeycomb panel and method of making same Patent
[NASA-CASE-XMF-01402] c18 N71-21651

CARO, E. B.
High power RF coaxial switch
[NASA-CASE-NFO-14229-1] c33 N80-18285

CARON, P. R.
Logarithmic function generator utilizing an exponentially varying signal in an inverse manner
[NASA-CASE-ERC-10267] c09 N72-23173
Phase control circuits using frequency multiplications for phased array antennas
[NASA-CASE-ERC-10285] c10 N73-16206

CARPINI, T. D.
Flow velocity and directional instrument
[NASA-CASE-LAR-10855-1] c14 N73-13415

CARR, W. F.
Split nut separation system Patent
[NASA-CASE-XNP-06914] c15 N71-21489

CARRAWAY, J. B.
Miniature multichannel biotelemeter system
[NASA-CASE-NFO-13065-1] c52 N74-26625

CARROLL, W. F.
Stabilized zinc oxide coating compositions Patent
[NASA-CASE-XMF-07770-2] c18 N71-26772

CARSON, J. M.
Quasi-optical microwave component Patent
[NASA-CASE-ERC-10011] c07 N71-29065

CARSON, L. M.
Discriminator aided phase lock acquisition for suppressed carrier signals
[NASA-CASE-NPO-14311-1] c32 N79-14276
PN lock indicator for dithered PN code tracking loop
[NASA-CASE-NPO-14435-1] c33 N81-33405

CARSON, P. B.
Array phasing device Patent
[NASA-CASE-ERC-10046] c10 N71-18722

CARSON, W. B., JR.
Didymium hydrate additive to nickel hydroxide electrodes Patent
[NASA-CASE-XGS-03505] c03 N71-10608

CARTER, A. F.
Plasma accelerator Patent
[NASA-CASE-XLA-00675] c25 N70-33267
Method and apparatus for producing a plasma Patent
[NASA-CASE-XLA-00147] c25 N70-34661

CARTER, J. B.
Sprayable low density ablator and application process
[NASA-CASE-MFS-23506-1] c24 N78-24290

CARTER, W. K.
Emergency earth orbital escape device
[NASA-CASE-MSC-13281] c31 N72-18859

CARUSO, A. J.
Sorption vacuum trap Patent
[NASA-CASE-XER-09519] c14 N71-18483

CARUSO, V. P.
Method of peening and portable peening gun
[NASA-CASE-MFS-23047-1] c37 N76-18454

CARVER, V. C.
Electrically conductive palladium containing polyimide films
[NASA-CASE-LAR-12705-1] c33 N80-24549

CASE, E. C.
Space suit
[NASA-CASE-MSC-12609-1] c05 N73-32012

CASEY, L. O.
Electrical load protection device Patent
[NASA-CASE-MSC-12135-1] c09 N71-12526

CASH, W. B., JR.
Pulse transducer with artifact signal attenuator
[NASA-CASE-FRC-11012-1] c52 N80-23969

CASHION, K. D.
Solar optical telescope dome control system Patent
[NASA-CASE-MSC-10966] c14 N71-19568

CASON, E. L.
Apparatus including a plurality of spaced transformers for locating short circuits in cables
[NASA-CASE-KSC-10899-1] c33 N79-18193

CASTLE, K. D.
Shielded conductor cable system
[NASA-CASE-MSC-12745-1] c33 N81-27397

CASTLEMAN, K. R.
Automated clinical system for chromosome analysis
[NASA-CASE-NPO-13913-1] c52 N79-12694

CATLAN, T. G.
High contrast cathode ray tube
[NASA-CASE-ERC-10468] c09 N72-20206

CAUDILL, L. O.
Long range laser traversing system
[NASA-CASE-GSC-11262-1] c36 N74-21091

CECCON, R. L.
Optical pump and driver system for lasers
[NASA-CASE-ERC-10283] c16 N72-25485

CELLIER, A.
Digital numerically controlled oscillator
[NASA-CASE-MSC-16747-1] c33 N81-17349

CEPOLINA, P. J.
Strain gauge measuring techniques Patent
[NASA-CASE-XGS-04478] c14 N71-24233

CERINI, D. J.
Hydrogen-rich gas generator
[NASA-CASE-NPO-13560-1] c44 N77-10636
Start up system for hydrogen generator used with
an internal combustion engine
[NASA-CASE-NPO-13849-1] c28 N80-10374

CERVENKA, P. O.
External bulb variable volume maser
[NASA-CASE-GSC-12334-1] c36 N79-14362

CHAI, A. T.
High voltage planar multijunction
[NASA-CASE-LEW-13400-1] c44 N81-16528
High voltage V-groove solar cell
[NASA-CASE-LEW-13401-1] c44 N81-16529

CHAMBERLAIN, F. B.
Optical binocular scanning apparatus
[NASA-CASE-NPO-11002] c14 N72-22441
System for forming a quadrified image comprising
angularly related fields of view of a three
dimensional object
[NASA-CASE-NPO-14219-1] c74 N81-17886

CHAMBERS, A. B.
Temperature controller for a fluid cooled garment
[NASA-CASE-ARC-10599-1] c05 N73-26071
Walking boot assembly
[NASA-CASE-ARC-11101-1] c54 N78-17675

CHAMIS, C. C.
Hybrid composite laminate structures
[NASA-CASE-LEW-12118-1] c24 N77-27188

CHANDLER, J. A.
Discrete local altitude sensing device Patent
[NASA-CASE-XMS-03792] c14 N70-41812
Line cutter Patent
[NASA-CASE-XMS-04072] c15 N70-42017
Spacecraft radiator cover Patent
[NASA-CASE-MSC-12049] c31 N71-16080
Winch having cable position and load indicators
Patent
[NASA-CASE-MSC-12052-1] c15 N71-24599

CHANDLER, W. A.
Cryogenic storage system Patent
[NASA-CASE-XMS-04390] c31 N70-41671

CHANEY, B. E.
Method of purifying metallurgical grade silicon
employing reduced pressure atmospheric control
[NASA-CASE-NPO-14474-1] c26 N80-14229

CHANG, C. C.
Microwave integrated circuit for Josephson
voltage standards
[NASA-CASE-MFS-23845-1] c33 N81-17348

CHAO, J. I.
Locking mechanism for orthopedic braces
[NASA-CASE-GSC-12082-2] c52 N81-25661

CHAPMAN, C. P.
Switching circuit Patent
[NASA-CASE-INP-06505] c10 N71-24799
Peak acceleration limiter for vibrational tester
Patent
[NASA-CASE-NPO-10556] c14 N71-27185
Apparatus for recovering matter adhered to a
host surface
[NASA-CASE-NPO-11213] c15 N73-20514
Automated attendance accounting system
[NASA-CASE-NPO-11456] c08 N73-26176
Servo-controlled intravital microscope system
[NASA-CASE-NPO-15214-1] c35 N75-25123

CHAPMAN, R. M.
Inflation system for balloon type satellites
Patent
[NASA-CASE-XGS-03351] c31 N71-16081

CHAPPELLE, R. W.
Use of the enzyme hexokinase for the reduction
of inherent light levels
[NASA-CASE-XGS-05533] c04 N69-27487
Light detection instrument Patent
[NASA-CASE-XGS-05534] c23 N71-16355
Lyophilized reaction mixtures Patent
[NASA-CASE-XGS-05532] c06 N71-17705
Flavin coenzyme assay
[NASA-CASE-GSC-10565-1] c06 N72-25149
Method of detecting and counting bacteria in
body fluids
[NASA-CASE-GSC-11092-2] c04 N73-27052
Protein sterilization method of firefly
luciferase using reduced pressure and
molecular sieves
[NASA-CASE-GSC-10225-1] c06 N73-27086
Automatic instrument for chemical processing to
detect microorganism in biological samples by
measuring light reactions
[NASA-CASE-GSC-11169-2] c05 N73-32011
Method of detecting and counting bacteria
[NASA-CASE-GSC-11917-2] c51 N76-29891
Application of luciferase assay for ATP to
antimicrobial drug susceptibility
[NASA-CASE-GSC-12039-1] c51 N77-22794
Rapid, quantitative determination of bacteria in
water
[NASA-CASE-GSC-12158-1] c51 N78-22585
Determination of antimicrobial susceptibilities
on infected urines without isolation
[NASA-CASE-GSC-12046-1] c52 N79-14750

CHARLES, J. P.
Floating nut retention system
[NASA-CASE-MSC-16938-1] c37 N80-23653

CHARLTON, K. W.
Pneumatic system for controlling and actuating
pneumatic cyclic devices
[NASA-CASE-XMS-04843] c03 N69-21469

CHARNOISKY, A. J.
Tool attachment for spreading loose elements
away from work Patent
[NASA-CASE-XMF-02107] c15 N71-10809

CHASE, R. W.
Helmet latching and attaching ring
[NASA-CASE-XMS-04670] c54 N78-17678

CHASE, R. D.
Vehicle simulator binocular multiplanar visual
display system
[NASA-CASE-ARC-10808-1] c09 N76-24280
Spectrally balanced chromatic landing approach
lighting system
[NASA-CASE-ARC-10990-1] c04 N77-12031
Full color hybrid display for aircraft simulators
[NASA-CASE-ARC-10903-1] c09 N78-18083
Environmental fog/rain visual display system for
aircraft simulators
[NASA-CASE-ARC-11158-1] c09 N79-33220

CHATHAM, D. C.
Spacecraft docking and alignment system
[NASA-CASE-MSC-12559-1] c18 N76-14186

CHEN, B. C. J.
Waveguide cooling system
[NASA-CASE-NPO-15401-1] c33 N81-29344

CHEN, C. J.
Isotope separation using metallic vapor lasers
[NASA-CASE-NPO-13550-1] c36 N77-26477

CHEN, W.
Arterial pulse wave pressure transducer
[NASA-CASE-GSC-11531-1] c52 N74-27566

CHEN, W. S.
Wind tunnel microphone structure Patent
[NASA-CASE-INP-00250] c11 N71-28779

CHENG, D. Y.
Reversed cowl flap inlet thrust augmentor
[NASA-CASE-ARC-10754-1] c07 N75-24736
Noise suppressor for turbo fan jet engines
[NASA-CASE-ARC-10812-1] c07 N76-18131
System for measuring Reynolds in a turbulently
flowing fluid
[NASA-CASE-ARC-10755-2] c34 N76-27517
System for measuring three fluctuating velocity
components in a turbulently flowing fluid
[NASA-CASE-ARC-10974-1] c34 N77-27345

CHERBAK, A. S.
Maximum power point tracker Patent
[NASA-CASE-GSC-10376-1] c14 N71-27407

- CHERN, S. S.
Chemical vapor deposition reactor
[NASA-CASE-NPO-13650-1] c25 N79-28253
Induced junction solar cell and method of fabrication
[NASA-CASE-NPO-13786-1] c44 N80-29835
- CHERNOFF, R.
Frequency translating phase conjugation circuit for active retrodirective antenna array
[NASA-CASE-NPO-14536-1] c32 N81-14185
- CHERNOFF, R. C.
Phase conjugation method and apparatus for an active retrodirective antenna array
[NASA-CASE-NPO-13641-1] c32 N79-24210
- CHESTNUTT, D.
Variably positioned guide vanes for aerodynamic choking
[NASA-CASE-LAR-10642-1] c07 N74-31270
- CHI, K.
High pulse rate high resolution optical radar system
[NASA-CASE-NPO-11426] c07 N73-26119
- CHIAO, B. Y.
Optical frequency waveguide Patent
[NASA-CASE-HQN-10541-1] c07 N71-26291
Optical frequency waveguide and transmission system
[NASA-CASE-HQN-10541-3] c23 N72-23695
- CHILDRESS, J. D.
Process for the preparation of brushite crystals
[NASA-CASE-BRC-10338] c04 N72-33072
- CHILDS, J. H.
High-vacuum condenser tank for ion rocket tests Patent
[NASA-CASE-XLE-00168] c11 N70-33278
Electric propulsion engine test chamber Patent
[NASA-CASE-XLE-00252] c11 N70-34844
- CHILENSKI, J. J.
Ignition system for monopropellant combustion devices Patent
[NASA-CASE-XNP-00249] c28 N70-38249
- CHILTON, R. G.
Space capsule Patent
[NASA-CASE-XLA-00149] c31 N70-37938
Space capsule Patent
[NASA-CASE-XLA-01332] c31 N71-15664
- CHIOA, R. Y.
Laser machining apparatus Patent
[NASA-CASE-HQN-10541-2] c15 N71-27135
Optical frequency waveguide and transmission system Patent
[NASA-CASE-HQN-10541-4] c16 N71-27183
- CHISEL, D. M.
Fluidic proportional thruster system
[NASA-CASE-ARC-10106-1] c28 N72-22769
- CHONG, C. F.
Flipflop interrogator and bi-polar current driver Patent
[NASA-CASE-XGS-03058] c10 N71-19547
- CHOW, B. Y.
Elastic universal joint Patent
[NASA-CASE-XNP-00416] c15 N70-36947
- CHOWNING, D.
Emergency earth orbital escape device
[NASA-CASE-MSC-13281] c31 N72-18859
- CHREITZBERG, A. M.
Electric battery and method for operating same Patent
[NASA-CASE-XGS-01674] c03 N71-25129
- CHRISTENSEN, W. W.
Chelate-modified polymers for atmospheric gas chromatography
[NASA-CASE-ARC-11154-1] c25 N80-23383
- CHRISTIAN, L. M.
Resuscitation apparatus Patent
[NASA-CASE-XMS-01115] c05 N70-35922
- CHRISTOPHER, P. A.
Method of fabricating an object with a thin wall having a precisely shaped slit
[NASA-CASE-LAR-10409-1] c31 N74-21059
- CHRISTY, C. L., JR.
Infusible silazane polymer and process for producing same
[NASA-CASE-XMF-02526-1] c27 N79-21190
- CHU, T. L.
Fabrication of polycrystalline solar cells on low-cost substrates
[NASA-CASE-GSC-12022-1] c44 N76-28635
- Process for utilizing low-cost graphite substrates for polycrystalline solar cells
[NASA-CASE-GSC-12022-2] c44 N78-24609
- CHUMLEY, J. F.
Zero gravity apparatus Patent
[NASA-CASE-XMF-06515] c14 N71-23227
- CHUTJIAN, A.
High resolution threshold photoelectron spectroscopy by electron attachment
[NASA-CASE-NFO-14078-1] c72 N80-14877
- CIEPLUCH, C. C.
Apparatus for igniting solid propellants Patent
[NASA-CASE-XLE-00207] c28 N70-33375
Method of igniting solid propellants Patent
[NASA-CASE-XLE-01988] c27 N71-15634
- CISSELL, B. E.
Threadless fastener apparatus Patent
[NASA-CASE-XFR-05302] c15 N71-23254
- CISEK, T. F.
Growth of silicon carbide crystals on a seed while pulling silicon crystals from a melt
[NASA-CASE-NFO-13969-1] c76 N79-23798
Method of growing a ribbon crystal particularly suited for facilitating automated control of ribbon width
[NASA-CASE-NPO-14295-1] c76 N80-32245
- CLAPP, W. H.
Increasing efficiency of switching type regulator circuits Patent
[NASA-CASE-XMS-09352] c09 N71-23316
- CLARK, C. E.
Helmet weight simulator
[NASA-CASE-LAR-12320-1] c54 N81-27806
- CLARK, P. L.
Hypersonic test facility Patent
[NASA-CASE-XLA-00378] c11 N71-15925
Hypersonic test facility Patent
[NASA-CASE-XLA-05378] c11 N71-21475
- CLARK, B. K.
Thermal pump-compressor for space use Patent
[NASA-CASE-XLA-00377] c33 N71-17610
- CLARK, J. R.
Automated fluid chemical analyzer Patent
[NASA-CASE-XNP-09451] c06 N71-26754
- CLARK, K. H.
Apparatus for assembling space structure
[NASA-CASE-MFS-23579-1] c18 N79-11108
Electrical self-aligning connector
[NASA-CASE-MFS-25211-1] c33 N80-32651
Pneumatic inflatable end effector
[NASA-CASE-MFS-23696-1] c54 N81-26718
- CLARK, B. K.
Fixture for environmental exposure of structural materials under compression
[NASA-CASE-LAR-12602-1] c35 N81-19429
- CLARK, R. L.
Deposition apparatus
[NASA-CASE-LAR-10541-1] c15 N72-32487
- CLARK, R. T.
Horn feed having overlapping apertures Patent
[NASA-CASE-GSC-10452] c07 N71-12396
- CLARKE, D. E.
Thermal compression bonding of interconnectors
[NASA-CASE-GSC-10303] c15 N72-22487
- CLATTERBUCK, C. H.
Spacecraft battery seals
[NASA-CASE-XGS-03864] c15 N69-24320
Process for making RF shielded cable connector assemblies and the products formed thereby
[NASA-CASE-GSC-11215-1] c09 N73-28083
- CLAUSS, B. C.
Transmission line thermal short Patent
[NASA-CASE-XNP-09775] c09 N71-20445
Circulator having quarter wavelength resonant post and parametric amplifier circuits utilizing the same Patent
[NASA-CASE-XNP-02140] c09 N71-23097
High-gain, broadband traveling wave maser Patent
[NASA-CASE-NFO-10548] c16 N71-24831
Maser for frequencies in the 7-20 GHz range
[NASA-CASE-NFO-11437] c16 N72-28521
Refrigerated coaxial coupling
[NASA-CASE-NFO-13504-1] c33 N75-30430
Reflected-wave maser
[NASA-CASE-NPO-13490-1] c36 N76-31512
Dielectric-loaded waveguide circulator for cryogenically cooled and cascaded maser waveguide structures
[NASA-CASE-NPO-14254-1] c36 N80-18372

Maser amplifier slow wave structure
[NASA-CASE-NPO-15211-1] c36 N81-24425

Resonant isolator for maser amplifier
[NASA-CASE-NPO-15201-1] c36 N81-24426

CLAWSON, G. T.
Method and apparatus for checking fire detectors
[NASA-CASE-GSC-11600-1] c35 N74-21019

CLAY, F. P., JR.
Ionization vacuum gauge with all but the end of the ion collector shielded Patent
[NASA-CASE-XLA-07424] c14 N71-18482

CLELAND, E. L.
Gas diffusion liquid storage bag and method of use for storing blood
[NASA-CASE-NPO-13930-1] c52 N79-14749

CLEMMENS, G. W., JR.
Deep space monitor communication satellite system Patent
[NASA-CASE-XAC-06029-1] c31 N71-24813

CLEMMENS, P. W.
Device for configuring multiple leads
[NASA-CASE-MFS-22133-1] c33 N74-26977

CLEMENT, W. G.
Friction measuring apparatus Patent
[NASA-CASE-XNP-08680] c14 N71-22995

CLEMENTS, P. A.
System for stabilizing cable phase delay utilizing a coaxial cable under pressure
[NASA-CASE-NPO-13138-1] c33 N74-17927

CLEMONS, D. L., JR.
Thermal control of space vehicles Patent
[NASA-CASE-XLA-01291] c33 N70-36617

CLEMONS, J. I., JR.
An instrument for determining coincidence and elapse time between independent sources of random sequential events
[NASA-CASE-LAR-12531-1] c35 N81-31529

CLEMONS, J. H.
Method of bonding plasticized elastomer to metal and article produced thereby
[NASA-CASE-MFS-25181-1] c27 N81-16238

CLEVELAND, G. J.
Medical subject monitoring systems
[NASA-CASE-MSC-14180-1] c52 N76-14757

CLEVENSON, S. A.
Ride quality meter
[NASA-CASE-LAR-12882-1] c54 N81-31848

CLICKNER, R. E., JR.
Umbilical disconnect Patent
[NASA-CASE-XLA-00711] c03 N71-12258

CLIFF, R. A.
Data processor having multiple sections activated at different times by selective power coupling to the sections Patent
[NASA-CASE-XGS-04767] c08 N71-12494

Ripple add and ripple subtract binary counters Patent
[NASA-CASE-XGS-04766] c08 N71-18602

Apparatus for computing square roots Patent
[NASA-CASE-XGS-04768] c08 N71-19437

Digitally controlled frequency synthesizer Patent
[NASA-CASE-XGS-02317] c09 N71-23525

SCR lamp driver
[NASA-CASE-GSC-10221-1] c09 N72-23171

Digital phase-locked loop
[NASA-CASE-GSC-11623-1] c33 N75-25040

CLIFF, W. C.
Wind measurement system
[NASA-CASE-MFS-23362-1] c47 N77-10753

CLINE, R. W.
Method and apparatus for optically monitoring the angular position of a rotating mirror
[NASA-CASE-GSC-11353-1] c74 N74-21304

CLOTFELTER, W. M.
Apparatus for the determination of the existence or non-existence of a bonding between two members Patent
[NASA-CASE-MFS-13686] c15 N71-18132

Device for measuring the ferrite content in an austenitic stainless-steel weld
[NASA-CASE-MFS-22907-1] c26 N76-18257

Method for measuring biaxial stress in a body subjected to stress inducing loads
[NASA-CASE-MFS-23299-1] c39 N77-28511

CLOUGH, L. G.
Driving lamps by induction
[NASA-CASE-MFS-21214-1] c09 N73-30181

COBIN, J. C.
Latching mechanism Patent

[NASA-CASE-MSC-15474-1] c15 N71-26162

COCCA, P. J.
Method and apparatus for detecting surface ions on silicon diodes and transistors
[NASA-CASE-ERC-10325] c15 N72-25457

COB, H. H.
High-speed rolling element bearing
[NASA-CASE-LEW-10856-1] c15 N72-22490

COB, P. L., JR.
Supersonic transport
[NASA-CASE-LAR-11932-1] c05 N78-32086

Propulsive lateral control nozzle
[NASA-CASE-LAR-12136-1] c08 N81-33210

COFFINBERRY, G. A.
Oil cooling system for a gas turbine engine
[NASA-CASE-LEW-12830-1] c07 N77-23106

Oil cooling system for a gas turbine engine
[NASA-CASE-LEW-12321-1] c37 N78-10467

Fuel delivery system including heat exchanger means
[NASA-CASE-LEW-12793-1] c37 N79-11403

COHEN, D.
Fluid sample collector Patent
[NASA-CASE-XMS-06767-1] c14 N71-20435

COHEN, E. A.
Audio frequency marker system
[NASA-CASE-NPO-11147] c14 N72-27408

COHEN, M. F.
Digital modulator and demodulator Patent
[NASA-CASE-ERC-10041] c08 N71-29138

COHEN, M. S.
Nitramine propellants
[NASA-CASE-NPO-14103-1] c28 N78-31255

COHEN, E. A.
A method for selective gold diffusion of monolithic silicon devices and/or circuits Patent application
[NASA-CASE-ERC-10072] c09 N70-11148

Method and apparatus for stable silicon dioxide layers on silicon grown in silicon nitride ambient
[NASA-CASE-ERC-10073-1] c24 N74-19769

COHN, E. H.
Rechargeable battery which combats shape change of the zinc anode
[NASA-CASE-BQN-10862-1] c44 N76-29699

COHN, E. B.
Acoustical transducer calibrating system and apparatus
[NASA-CASE-FRC-10060-1] c14 N73-27379

COHN, S. B.
Dual band combiner for horn antenna
[NASA-CASE-NPO-14519-1] c32 N80-23524

COKER, L. B.
Quick disconnect latch and handle combination Patent
[NASA-CASE-MFS-11132] c15 N71-17649

COLBURN, H. E.
Automatic instrument for chemical processing to detect microorganism in biological samples by measuring light reactions
[NASA-CASE-GSC-11169-2] c05 N73-32011

COLE, H. A., JR.
Method and apparatus for measuring the damping characteristics of a structure
[NASA-CASE-ARC-10154-1] c14 N72-22440

COLE, H. A.
System for moving a probe to follow movements of tissue
[NASA-CASE-NPO-15197-1] c52 N81-26697

COLE, P. T.
Low friction magnetic recording tape Patent
[NASA-CASE-IGS-00373] c23 N71-15978

System for recording and reproducing pulse code modulated data Patent
[NASA-CASE-IGS-01021] c08 N71-21042

Friction measuring apparatus Patent
[NASA-CASE-XNP-08680] c14 N71-22995

Helical recorder arrangement for multiple channel recording on both sides of the tape
[NASA-CASE-GSC-10614-1] c09 N72-11224

COLES, W. D.
Twisted multifilament superconductor
[NASA-CASE-LEW-11726-1] c26 N73-26752

Method of fabricating a twisted composite superconductor
[NASA-CASE-LEW-11015] c26 N73-32571

COLLIER, L.
Garments for controlling the temperature of the

body Patent
[NASA-CASE-XMS-10269] c05 N71-24147

COLLIN, E. E.
Apparatus and method for skin packaging articles.
[NASA-CASE-MFS-20855] c15 N73-27405

COLLINS, D. D.
Simultaneous treatment of SO₂ containing stack
gases and waste water
[NASA-CASE-MSC-16258-1] c45 N79-12584

COLLINS, D. F., JR.
Fluid power transmitting gas bearing Patent
[NASA-CASE-ERC-1C097] c15 N71-28465

COLLINS, E. R.
Automated multi-level vehicle parking system
[NASA-CASE-NPO-13058-1] c37 N77-22480
Geological assessment probe
[NASA-CASE-NPO-14558-1] c46 N80-24906
System for slicing silicon wafers
[NASA-CASE-NPO-14406-1] c37 N80-29703

COLLINS, E. R., JR.
Impact energy absorbing system utilizing
fracturable material
[NASA-CASE-NPO-10671] c15 N72-20443

COLLINS, V. G.
Recovery of potable water from human wastes in
below-G conditions Patent
[NASA-CASE-XLA-03213] c05 N71-11207

COLLINS, W. A.
Flight control system
[NASA-CASE-MSC-13397-1] c21 N72-25595

COLONY, J. A.
Phototropic composition of matter
[NASA-CASE-XGS-03736] c14 N72-22443

COMANT, J. E.
Television simulation for aircraft and space
flight Patent
[NASA-CASE-XFR-03107] c09 N71-15449

CONE, C. D., JR.
Minimum induced drag airfoil body Patent
[NASA-CASE-XLA-00755] c01 N71-13410
Minimum induced drag airfoil body Patent
[NASA-CASE-XLA-05828] c01 N71-13411
Absolute focus lock for microscopes
[NASA-CASE-LAR-10184] c14 N72-22445
Process for control of cell division
[NASA-CASE-LAR-10773-3] c51 N77-25769

CONGER, C. C.
Inductance device with vacuum insulation
[NASA-CASE-LEW-10330-1] c09 N72-27226

CONIGLIO, G. V.
Petzval type objective including field shaping
lens Patent
[NASA-CASE-GSC-10700] c23 N71-30027

CONN, J. H.
Moment of inertia test fixture Patent
[NASA-CASE-XGS-01023] c14 N71-22992

CONNELL, E. W.
Flexible joint for pressurizable garment
[NASA-CASE-MSC-11072] c54 N74-32546

CONNOLLY, D. J.
Traveling wave tube circuit
[NASA-CASE-LEW-12013-1] c33 N79-10339
Coupled cavity traveling wave tube with velocity
tapering
[NASA-CASE-LEW-12296-1] c33 N80-19425

CONNOLLY, J. P.
Automatic real-time pair-feeding system for
animals
[NASA-CASE-ARC-10302-1] c51 N74-15778

CONNORS, J. F.
Annular rocket motor and nozzle configuration
Patent
[NASA-CASE-XLE-00078] c28 N70-33284
Annular supersonic decelerator or drogue Patent
[NASA-CASE-XLE-00222] c02 N70-37939
Penshape exhaust nozzle for supersonic engine
Patent
[NASA-CASE-XLE-00057] c28 N70-36711
Telescoping-spike supersonic inlet for aircraft
engines Patent
[NASA-CASE-XLE-00005] c28 N70-39899
Thrust and direction control apparatus Patent
[NASA-CASE-XLE-03583] c31 N71-17629

CONRAD, E. W.
Thrust vector control apparatus Patent
[NASA-CASE-XLE-00208] c28 N70-34294
Non-reusable kinetic energy absorber Patent
[NASA-CASE-XLE-00810] c15 N70-34861

CONRAD, W. E.
Frequency modulation demodulator threshold
extension device Patent
[NASA-CASE-MSC-12165-1] c07 N71-33696

CONSTANTINIDES, N. J.
Echo tracker/range finder for radars and sonars
[NASA-CASE-NFO-14361-1] c32 N79-26253
An electro-optical Doppler tracker means and
method for optical correlation of synthetic
aperture radar data
[NASA-CASE-NPO-14998-1] c33 N81-15194

CONWAY, E. J.
Method for detecting pollutants
[NASA-CASE-LAR-11405-1] c45 N76-31714

COOGAN, J. E.
Method of planetary atmospheric investigation
using a split-trajectory dual flyby mode Patent
[NASA-CASE-XAC-08494] c30 N71-15990

COOK, T. A.
Metering gun for dispensing precisely measured
charges of fluid
[NASA-CASE-MFS-21163-1] c54 N74-17853

COOK, W. E., JR.
Detector panels-micrometeoroid impact Patent
[NASA-CASE-XLA-05906] c31 N71-16221

COOLIDGE, J. E.
Data transfer system Patent
[NASA-CASE-NPO-12107] c08 N71-27255

COON, G. W.
Vibrating element electrometer with output
signal magnified over input signal by a
function of the mechanical Q of the vibrating
element Patent
[NASA-CASE-XAC-02807] c09 N71-23021
Thermally cycled magnetometer Patent
[NASA-CASE-XAC-03740] c14 N71-26135
Trielectrode capacitive pressure transducer
[NASA-CASE-ARC-10711-2] c33 N76-21390

COOPER, C. E.
Underwater space suit pressure control regulator
[NASA-CASE-MFS-20332] c05 N72-20097
Underwater space suit pressure control regulator
[NASA-CASE-MFS-20332-2] c05 N73-25125

COOPER, D. W.
Generator for a space power system Patent
[NASA-CASE-XLE-04250] c09 N71-20446
Method of forming metal hydride films
[NASA-CASE-LEW-12083-1] c37 N78-13436

COOPER, L. F.
Supercritical fuel injection system
[NASA-CASE-LEW-12990-1] c07 N81-29129

COOPER, W. E.
Collapsible Apollo couch
[NASA-CASE-MSC-13140] c05 N72-11085

COPELAND, J. T., JR.
High speed photo-optical time recording
[NASA-CASE-KSC-10294] c14 N72-18411

COBBIN, P. L.
Automatic fatigue test temperature programmer
Patent
[NASA-CASE-XLA-02059] c33 N71-24276

CORLEY, B. C.
Method and apparatus for rapid thrust increases
in a turbofan engine
[NASA-CASE-LEW-12971-1] c07 N80-18039

CORNETT, J. E.
Method and apparatus for rapid thrust increases
in a turbofan engine
[NASA-CASE-LEW-12971-1] c07 N80-18039
Integrated control system for a gas turbine engine
[NASA-CASE-LEW-12594-2] c07 N81-19116

CORNILLE, H. J., JR.
Stretch de-spin mechanism Patent
[NASA-CASE-XGS-00619] c30 N70-40016

CORNISE, S. D.
Flame detector operable in presence of proton
radiation
[NASA-CASE-MFS-21577-1] c19 N74-29410

CORREALE, J. V.
Absorbent product and articles made therefrom
[NASA-CASE-MSC-18223-1] c24 N81-16127

CORSON, B. W., JR.
Nozzle Patent
[NASA-CASE-XLA-00154] c28 N70-33374
Cascade plug nozzle
[NASA-CASE-LAR-11674-1] c07 N76-18117

CORWIN, E. E.
Apparatus for determining thermophysical
properties of test specimens

[NASA-CASE-LAR-11883-1] c09 N77-27131
COSTAKOS, W. C.
 Deployable flexible tunnel
 [NASA-CASE-MFS-22636-1] c37 N76-22540
COSTEN, R. C.
 Vortex generator for controlling the dispersion
 of effluents in a flowing liquid
 [NASA-CASE-LAR-12045-1] c34 N77-24423
COSTES, R. C.
 Self-recording portable soil penetrometer
 [NASA-CASE-MFS-20774] c14 N73-15420
COSTOGUE, R. M.
 Bonding machine for forming a solar array strip
 [NASA-CASE-NPO-13652-2] c44 N79-24431
COSTON, R. M.
 Dual solid cryogens for spacecraft refrigeration
 Patent
 [NASA-CASE-GSC-10188-1] c23 N71-24725
COTE, C. R.
 Display for binary characters Patent
 [NASA-CASE-XGS-04987] c08 N71-20571
COUCH, L. R.
 Heat pipe cooled probe
 [NASA-CASE-LAR-12588-1] c44 N81-24525
COUCH, R. R.
 Apparatus for aiding a pilot in avoiding a
 midair collision between aircraft
 [NASA-CASE-LAR-10717-1] c21 N73-30641
 Phase modulating with odd and even finite power
 series of a modulating signal
 [NASA-CASE-LAR-11607-1] c32 N77-14292
COULBERT, C. D.
 Multislot film cooled pyrolytic graphite rocket
 nozzle Patent
 [NASA-CASE-XNP-04389] c28 N71-20942
COUVILLON, L. A., JR.
 Signal-to-noise ratio estimating by taking ratio
 of mean and standard deviation of integrated
 signal samples Patent
 [NASA-CASE-XNP-05254] c07 N71-26791
 Method and apparatus for frequency-division
 multiplex communications by digital phase
 shift of carrier
 [NASA-CASE-NPO-11338] c08 N72-25208
 Apparatus for deriving synchronizing pulses from
 pulses in a single channel PCM communications
 system
 [NASA-CASE-NPO-11302-1] c07 N73-13149
 Pseudonoise (PN) synchronization of data system
 with derivation of clock frequency from
 received signal for clocking receiver PN
 generator
 [NASA-CASE-XNP-03623] c09 N73-28084
 Method and apparatus for a single channel
 digital communications system
 [NASA-CASE-NPO-11302-2] c32 N74-10132
COWAN, J. J.
 Holography utilizing surface plasmon resonances
 [NASA-CASE-MFS-22040-1] c35 N74-26946
COWDIN, R. T.
 Aircraft body-axis rotation measurement system
 [NASA-CASE-PRC-11043-1] c06 N81-22048
COWELL, T. E.
 Aerodynamic spike nozzle Patent
 [NASA-CASE-XGS-01143] c31 N71-15647
COX, J. A.
 Analog-to-digital converter
 [NASA-CASE-MSC-13110-1] c08 N72-22163
COYNER, J. V.
 Foldable beam
 [NASA-CASE-LAR-12077-1] c31 N81-25259
CRABILL, R. L.
 Control system for rocket vehicles Patent
 [NASA-CASE-XLA-01163] c21 N71-15582
CRAIG, R. A.
 Reduction of nitric oxide emissions from a
 combustor
 [NASA-CASE-ARC-10814-2] c07 N80-26298
CRAWFORD, R. W.
 Apparatus and method of inserting a
 microelectrode in body tissue or the like
 using vibration means
 [NASA-CASE-NPO-13910-1] c52 N79-27836
 System for moving a probe to follow movements of
 tissue
 [NASA-CASE-NPO-15197-1] c52 N81-26697
CRAWFORD, R.
 Solar energy powered heliotrope
 [NASA-CASE-GSC-10945-1] c21 N72-31637

CRAWFORD, R. F.
 Foldable beam
 [NASA-CASE-LAR-12077-1] c31 N81-25259
CRAWFORD, W. E.
 Drive circuit for minimizing power consumption
 in inductive load Patent
 [NASA-CASE-NPO-10716] c09 N71-24892
CREASY, W. K.
 Shock absorber Patent
 [NASA-CASE-XMS-03722] c15 N71-21530
CREE, D.
 Amplifier drift tester
 [NASA-CASE-XMS-05562-1] c09 N69-39986
CREE, R. F.
 Catalyst for growth of boron carbide single
 crystal whiskers
 [NASA-CASE-IBQ-03903] c15 N69-21922
CREEDON, J. F.
 Weld-bonded titanium structures
 [NASA-CASE-LAR-11549-1] c37 N77-11397
CREEL, T. E., JR.
 Apparatus for determining thermophysical
 properties of test specimens
 [NASA-CASE-LAR-11883-1] c09 N77-27131
 A rectangular rod-wall sound shield
 [NASA-CASE-LAR-12883-1] c09 N81-29138
CREPEAU, P. C.
 Flexible, repairable, portable material for
 electrical connectors Patent
 [NASA-CASE-XGS-05180] c18 N71-25881
CRESS, S. B.
 Coaxial inverted geometry transistor having
 buried emitter
 [NASA-CASE-ARC-10330-1] c09 N73-32112
CRISSEY, J. R.
 Display for binary characters Patent
 [NASA-CASE-XGS-04987] c08 N71-20571
CREWS, J. E., JR.
 Strain coupled servo control system Patent
 [NASA-CASE-XLA-08530] c32 N71-25360
CRIBB, R. E.
 Parasitic probe antenna Patent
 [NASA-CASE-IKS-09348] c09 N71-13521
 Weatherproof helix antenna Patent
 [NASA-CASE-IKS-08485] c07 N71-19493
 VHF/UHF parasitic probe antenna Patent
 [NASA-CASE-IKS-09340] c07 N71-24614
 Validation device for spacecraft checkout
 equipment Patent
 [NASA-CASE-XKS-10543] c07 N71-26292
 Protective suit having an audio transceiver Patent
 [NASA-CASE-KSC-10164] c07 N71-33108
 Collapsible high gain antenna
 [NASA-CASE-KSC-10392] c07 N73-26117
CROFT, R. E.
 Personal propulsion unit Patent
 [NASA-CASE-MFS-20130] c28 N71-27585
CROFTS, D. E.
 Heat flux sensor assembly
 [NASA-CASE-XMS-05909-1] c14 N69-27459
CROSWELL, W. F.
 Omnidirectional microwave spacecraft antenna
 Patent
 [NASA-CASE-XLA-03114] c09 N71-22888
 Stacked array of omnidirectional antennas
 [NASA-CASE-LAR-10545-1] c09 N72-21244
CROUCH, C. E.
 Coal-rock interface detector
 [NASA-CASE-MFS-23725-1] c43 N79-31706
CROUCH, R. W.
 Shrink-fit gas valve Patent
 [NASA-CASE-XGS-00587] c15 N70-35087
CROUCH, R. E.
 Vapor phase growth of groups 3-5 compounds by
 hydrogen chloride transport of the elements
 [NASA-CASE-LAR-11144-1] c25 N75-26043
CROW, R. B.
 Wide band doubler and sine wave quadrature
 generator
 [NASA-CASE-NPO-11133] c10 N72-20223
 Filter for third order phase locked loops
 [NASA-CASE-NPO-11941-1] c10 N73-27171
 Frequency discriminator and phase detector circuit
 [NASA-CASE-NPO-11515-1] c33 N77-13315
CROWELL, R. T.
 System for refurbishing and processing parachutes
 [NASA-CASE-KSC-11042-1] c02 N81-14967
 System and method for refurbishing and
 processing parachutes

[NASA-CASE-KSC-11042-2] c02 N81-26073
CRUM, G. W.
 Foot pedal operated fluid type exercising device
 [NASA-CASE-MSC-11561-1] c05 N73-32014
CRUMPLEY, J. F.
 Vacuum pressure molding technique
 [NASA-CASE-LAR-10073-1] c37 N76-24575
CRUMPLEY, W. B.
 All-directional fastener Patent
 [NASA-CASE-XLA-01807] c15 N71-10799
 Multilegged support system Patent
 [NASA-CASE-XLA-01326] c11 N71-21481
CRUTCHER, J. E.
 Isolation coupling arrangement for a torque
 measuring system
 [NASA-CASE-XLA-04897] c15 N72-22482
CUBBISON, R. W.
 Thrust and direction control apparatus Patent
 [NASA-CASE-XLE-03583] c31 N71-17629
CUBLEY, H. D.
 Antenna array phase quadrature tracking system
 Patent
 [NASA-CASE-MSC-12205-1] c07 N71-27056
CUDDIHY, E. F.
 Method of making hollow elastomeric bodies
 [NASA-CASE-NPO-13535-1] c37 N76-31524
CULLER, V. H.
 Myocardium wall thickness transducer and
 measuring method
 [NASA-CASE-NPO-13644-1] c52 N76-29895
 Catheter tip force transducer for cardiovascular
 research
 [NASA-CASE-NPO-13643-1] c52 N76-29896
 Simultaneous muscle force and displacement
 transducer
 [NASA-CASE-NPO-14212-1] c52 N80-27072
 Multifunctional transducer
 [NASA-CASE-NPO-14329-1] c52 N81-20703
CULOTTA, R. F.
 Static pressure orifice system testing method
 and apparatus
 [NASA-CASE-LAR-12269-1] c35 N80-18358
CULP, D. H.
 Process for preparing liquid metal electrical
 contact device
 [NASA-CASE-LEW-11978-1] c33 N77-26385
 Liquid metal slip ring
 [NASA-CASE-LEW-12277-2] c33 N78-25323
CUNNINGHAM, H. R.
 Potable water dispenser
 [NASA-CASE-MFS-21115-1] c54 N74-12779
CUNNINGHAM, J. W.
 Automatic thermal switch
 [NASA-CASE-GSC-12415-1] c34 N80-18338
 Automatic thermal switch
 [NASA-CASE-GSC-12553-1] c33 N80-21671
CUNNINGHAM, R. E.
 Hydrostatic bearing support
 [NASA-CASE-LEW-11158-1] c37 N77-26486
CURREN, A. H.
 Ion sputter textured graphite
 [NASA-CASE-LEW-12919-1] c24 N81-27198
CURRIE, J. R.
 Bi-carrier demodulator with modulation Patent
 [NASA-CASE-XMF-01160] c07 N71-11298
 Transistor servo system including a unique
 differential amplifier circuit Patent
 [NASA-CASE-XMF-05195] c10 N71-24861
 Pulse width inverter Patent
 [NASA-CASE-MFS-10068] c10 N71-25139
 Ratemeter
 [NASA-CASE-MFS-20418] c14 N73-24473
 Induction motor control system with voltage
 controlled oscillator circuit
 [NASA-CASE-MFS-21465-1] c10 N73-32145
 Contour measurement system
 [NASA-CASE-MFS-23726-1] c43 N79-26439
 Multi-channel temperature measurement
 amplification system
 [NASA-CASE-MFS-23775-1] c35 N80-17421
 Solar energy control system
 [NASA-CASE-MFS-25267-1] c44 N80-17544
 Photoelectric detection system
 [NASA-CASE-MFS-23776-1] c74 N80-25134
CURRIE, R. E., JR.
 Relay binary circuit Patent
 [NASA-CASE-XMF-00421] c09 N70-34502
CURRY, J. E.
 Method of producing alternating ether siloxane

copolymers Patent
 [NASA-CASE-XMF-02584] c06 N71-20905
CURRY, K. C.
 Torsional disconnect unit
 [NASA-CASE-NPO-10704] c15 N72-20445
CURRY, B. E.
 Display research collision warning system
 [NASA-CASE-HQN-10703] c21 N73-13643
CURTIS, D. L.
 Life support system
 [NASA-CASE-MSC-12411-1] c05 N72-26096
CYGNAROWICZ, T. A.
 System for and method of freezing biological
 tissue
 [NASA-CASE-GSC-12173-1] c51 N79-10694
CZARINSKI, E. A.
 Programmable telemetry system Patent
 [NASA-CASE-GSC-10131-1] c07 N71-24624

D

DARGES, J. J.
 Motor run-up system
 [NASA-CASE-NPO-13374-1] c33 N75-19524
DARR, W. R.
 Clear air turbulence detector
 [NASA-CASE-MFS-21244-1] c36 N75-15028
 Focused laser Doppler velocimeter
 [NASA-CASE-MFS-23178-1] c35 N77-10493
 Wind measurement system
 [NASA-CASE-MFS-23362-1] c47 N77-10753
DAILEDA, J. J.
 Multi-purpose wind tunnel reaction control model
 block
 [NASA-CASE-MSC-19706-1] c09 N78-31129
DAILEY, C. C.
 Microwave power receiving antenna Patent
 [NASA-CASE-MFS-20333] c09 N71-13486
 Method of and means for testing a
 glancing-incidence mirror system of an X-ray
 telescope
 [NASA-CASE-MFS-22409-2] c74 N78-15880
DALE, W. J.
 Method of fabricating an article with cavities
 [NASA-CASE-LAR-10318-1] c31 N74-18089
 Bonding method in the manufacture of continuous
 regression rate sensor devices
 [NASA-CASE-LAR-10337-1] c24 N75-30260
DALELIO, G. F.
 Synthesis of polymeric schiff bases by
 schiff-base exchange reactions Patent
 [NASA-CASE-XMF-08651] c06 N71-11236
 Direct synthesis of polymeric schiff bases from
 two amines and two aldehydes Patent
 [NASA-CASE-XMF-08655] c06 N71-11239
 Azine polymers and process for preparing the
 same Patent
 [NASA-CASE-XMF-08656] c06 N71-11242
 Synthesis of polymeric schiff bases by reaction
 of acetals and amine compounds Patent
 [NASA-CASE-XMF-08652] c06 N71-11243
 Aromatic diamine-aromatic dialdehyde high
 molecular weight Schiff base polymers prepared
 in a monofunctional Schiff base Patent
 [NASA-CASE-XMF-03074] c06 N71-24740
DALY, W. E.
 Fault tolerant clock apparatus utilizing a
 controlled minority of clock elements
 [NASA-CASE-MSC-12531-1] c35 N75-30504
DANE, J. E.
 High-torque open-end wrench
 [NASA-CASE-NPO-13541-1] c37 N79-14383
DANERON, C. E.
 Instrument for measuring potentials on two
 dimensional electric field plots Patent
 [NASA-CASE-XLA-08493] c10 N71-19421
DANNIG, A. H., JR.
 Capacitive tank gaging apparatus being
 independent of liquid distribution
 [NASA-CASE-MFS-21629] c14 N72-22442
DANCHENKO, V.
 Radiation hardening of MOS devices by boron
 [NASA-CASE-GSC-11425-1] c76 N74-20329
 Radiation hardening of MOS devices by boron
 [NASA-CASE-GSC-11425-2] c76 N75-25730
DANE, D. H.
 Harness assembly Patent
 [NASA-CASE-MFS-14671] c05 N71-12341

Air cushion lift pad Patent [NASA-CASE-MFS-14685]	c31 N71-15689	Solar energy power system [NASA-CASE-MFS-21626-2]	c44 N76-23675
Batchet mechanism Patent [NASA-CASE-MFS-12805]	c15 N71-17805	DAVIS, D. C. Fatigue failure load indicator [NASA-CASE-LAR-12027-1]	c39 N79-22537
Mechanical simulator of low gravity conditions Patent [NASA-CASE-MFS-10555]	c11 N71-19494	DAVIS, D. P. Quick disconnect coupling [NASA-CASE-MFO-11202]	c15 N72-25450
Mechanically actuated triggered hand [NASA-CASE-MFS-20413]	c15 N72-21463	DAVIS, E. J. Cable stabilizer for open shaft cable operated elevators [NASA-CASE-KSC-10513]	c15 N72-25453
Sprag solenoid brake [NASA-CASE-MFS-21846-1]	c37 N74-26976	DAVIS, E. S. Anti-glare improvement for optical imaging systems Patent [NASA-CASE-MFO-10337]	c14 N71-15604
Orthotic arm joint [NASA-CASE-MFS-21611-1]	c54 N75-12616	Radiant energy intensity measurement system Patent [NASA-CASE-XNP-06510]	c14 N71-23797
Remote manipulator system [NASA-CASE-MFS-22022-1]	c37 N76-15460	Reference voltage switching unit [NASA-CASE-MFO-11253]	c09 N72-17157
DANELLIS, J. V. Indomethacin-antihistamine combination for gastric ulceration control [NASA-CASE-ARC-11118-1]	c52 N81-25764	DAVIS, J. G., JR. Tube fabricating process [NASA-CASE-LAR-10203-1]	c15 N72-16330
DANGLE, E. E. Rocket engine Patent [NASA-CASE-XLE-00342]	c28 N70-37980	DAVIS, J. P. Multiducted electromagnetic pump Patent [NASA-CASE-MFO-10755]	c15 N71-27084
DANIELS, H. J. Adaptive tracking notch filter system Patent [NASA-CASE-XMF-01892]	c10 N71-22986	Shell side liquid metal boiler [NASA-CASE-MFO-10831]	c33 N72-20915
DANSKIN, J. H. Fuel injection pump for internal combustion engines Patent [NASA-CASE-MSC-12139-1]	c28 N71-14058	Uninsulated in-core thermionic diode [NASA-CASE-MFO-10542]	c09 N72-27228
DARCEY, R. J. Satellite communication system and method Patent [NASA-CASE-GSC-10118-1]	c07 N71-24621	DAVIS, J. W. Burst diaphragm flow initiator Patent [NASA-CASE-MFS-12915]	c11 N71-17600
DARR, J., JR. Threadless fastener apparatus Patent [NASA-CASE-XFR-05302]	c15 N71-23254	Wind tunnel test section [NASA-CASE-MFS-20509]	c11 N72-17183
DARROW, W. E., JR. Collapsible nozzle extension for rocket engines Patent [NASA-CASE-MFS-11497]	c28 N71-16224	Altitude simulation chamber for rocket engine testing [NASA-CASE-MFS-20620]	c11 N72-27262
DASGUPTA, K. Dual purpose optical instrument capable of simultaneously acting as spectrometer and diffractometer [NASA-CASE-XNP-05231]	c14 N73-28491	DAVIS, L. P. Isolation coupling arrangement for a torque measuring system [NASA-CASE-XLA-04897]	c15 N72-22482
DASTOOR, H. M. Enhancement of in vitro Guayule propagation [NASA-CASE-MFO-15213-1]	c51 N81-29728	DAVIS, H. S. Decomposition unit Patent [NASA-CASE-XMS-00583]	c28 N70-38504
DAUD, T. Copper doped polycrystalline silicon solar cell [NASA-CASE-MFO-14670-1]	c44 N81-19558	DAVIS, W. T. Strain coupled servo control system Patent [NASA-CASE-XLA-08530]	c32 N71-25360
DAVID-HALIG, H. A. Method and tool for machining a transverse slot about a bore [NASA-CASE-LAR-11855-1]	c37 N81-14319	Fatigue failure load indicator [NASA-CASE-LAR-12027-1]	c39 N79-22537
DAVID, H. H. Insulated electrocardiographic electrodes [NASA-CASE-MSC-14339-1]	c05 N75-24716	DAVISON, E. H. Meteoroid sensing apparatus having a coincidence network connected to a pair of capacitors Patent [NASA-CASE-XLE-01246]	c14 N71-10797
DAVIDS, L. H. Guidance and maneuver analyzer Patent [NASA-CASE-XNP-09572]	c14 N71-15621	DAVISON, H. W. Gaseous control system for nuclear reactors [NASA-CASE-XLE-04599]	c22 N72-20597
DAVIDSON, A. C. Spacecraft attitude sensor [NASA-CASE-GSC-10890-1]	c21 N73-30640	DAWN, F. S. Burn rate testing apparatus [NASA-CASE-XMS-09690]	c33 N72-25913
DAVIDSON, G. A. Compact spectroradiometer [NASA-CASE-HQN-10683]	c14 N71-34389	Lightweight electrically-powered flexible thermal laminate [NASA-CASE-MSC-12662-1]	c33 N79-12331
DAVIDSON, J. K. Ripple indicator [NASA-CASE-KSC-10162]	c09 N72-11225	Absorbent product and articles made therefrom [NASA-CASE-MSC-18223-1]	c24 N81-16127
DAVIDSON, J. S. W. Centrifuge mounted motion simulator Patent [NASA-CASE-XAC-00399]	c11 N70-34815	DAY, J. L. Electrode for biological recording [NASA-CASE-XMS-02872]	c05 N69-21925
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		DEBNAM, W. J. J. Magnetometer with a miniature transducer and automatic scanning [NASA-CASE-LAR-11617-2]	c35 N78-32397

DEBNAM, H. J., JR.

Vapor phase growth of groups 3-5 compounds by hydrogen chloride transport of the elements
[NASA-CASE-LAR-11144-1] c25 N75-26043

DEBOO, G. J.

Gyrator type circuit Patent
[NASA-CASE-XAC-10606-1] c09 N71-12517
Feedback integrator with grounded capacitor Patent
[NASA-CASE-XAC-10607] c10 N71-23669
Precision rectifier with FET switching means Patent
[NASA-CASE-ARC-10101-1] c09 N71-33109
Phase shift circuit apparatus
[NASA-CASE-ARC-10269-1] c10 N72-16172
Temperature compensated light source using a light emitting diode
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Self-tuning bandpass filter
[NASA-CASE-ARC-10264-1] c09 N73-20231
Electrical short locator
[NASA-CASE-ARC-11116-1] c33 N79-31498

DECARLO, F. S.

Failure detection and control means for improved drift performance of a gimbal platform system
[NASA-CASE-MFS-23551-1] c04 N76-26175

DECKER, A. J.

High powered arc electrodes
[NASA-CASE-LEW-11162-1] c33 N74-12913

DEDOLPH, R. D.

Rotary plant growth accelerating apparatus
[NASA-CASE-ARC-10722-1] c51 N75-25503

DEERKOSKI, L. F.

Signal-to-noise ratio determination circuit
[NASA-CASE-GSC-11239-1] c10 N73-25241
Switchable beamwidth monopulse method and system
[NASA-CASE-GSC-11924-1] c33 N76-27472
Pseudo noise code and data transmission method and apparatus
[NASA-CASE-GSC-12017-1] c32 N77-20308

DEFURIA, R. R.

Fluid power transmitting gas bearing Patent
[NASA-CASE-ERC-10097] c15 N71-28465

DEGENER, M. D.

Traversing probe Patent
[NASA-CASE-XFR-02007] c12 N71-24692

DEGRASSE, R. W.

Folded traveling wave maser structure Patent
[NASA-CASE-XNP-05219] c16 N71-15550

DEIS, B. C.

Traveling sealer for contoured table Patent
[NASA-CASE-XLA-01494] c15 N71-24164

DEL CASALE, L. A.

Signal generator
[NASA-CASE-XNP-05612] c09 N69-21468

DEL CURTO, B.

System for monitoring the presence of neutrals in a stream of ions Patent
[NASA-CASE-XNP-02592] c24 N71-20518

DEL DUCA, A.

Electronic divider and multiplier using photocells Patent
[NASA-CASE-XPR-05637] c09 N71-15480

DELANO, C. B.

Polymeric foams from cross-linkable poly-n-arylenebenzimidazoles
[NASA-CASE-ARC-11008-1] c27 N78-31232

DELAFLAINE, R. W.

Rotary leveling base platform
[NASA-CASE-ARC-10981-1] c37 N78-27425
Sweat collection capsule
[NASA-CASE-ARC-11031-1] c52 N81-29763

DELAURE, L. A.

Emergency earth orbital escape device
[NASA-CASE-MSC-13281] c31 N72-18859

DELGREGO, D. J.

Clear air turbulence detector
[NASA-CASE-MFS-21244-1] c36 N75-15028

DELIORBACK, L. H.

A system for concurrently delivering a stream of powdered fuel and a stream of powdered oxidizer to a combustion chamber for a reaction motor
[NASA-CASE-MFS-23904-1] c20 N79-13077

DELUCA, J. J.

Segmented superconducting magnet for a broadband traveling wave maser Patent
[NASA-CASE-XGS-10518] c16 N71-28554
Bonding of sapphire to sapphire by eutectic mixture of aluminum oxide and zirconium oxide

[NASA-CASE-GSC-11577-1] c37 N75-15992
Bonding of sapphire to sapphire by eutectic mixture of aluminum oxide and zirconium oxide
[NASA-CASE-GSC-11577-3] c24 N79-25143

DELVIGS, P.

Preparation of polyimides from mixtures of monomeric diamines and esters of polycarboxylic acids
[NASA-CASE-LEW-11325-1] c06 N73-27980
Curing agent for polyepoxides and epoxy resins and composites cured therewith
[NASA-CASE-LEW-13226-1] c27 N81-17260
Composition and method for making polyimide resin-reinforced fabric
[NASA-CASE-LEW-12933-1] c27 N81-19296

DELVISS, P.

Low temperature cross linking polyimides
[NASA-CASE-LEW-12876-1] c27 N80-26447

DERING, J.

Rapid, quantitative determination of bacteria in water
[NASA-CASE-GSC-12158-1] c51 N78-22585

DERING, J. W.

Determination of antimicrobial susceptibilities on infected urines without isolation
[NASA-CASE-GSC-12046-1] c52 N79-14750

DEHOGENES, C.

Low cycle fatigue testing machine
[NASA-CASE-LAR-10270-1] c32 N72-25877

DEMOREST, E. E.

Self-lubricating gears and other mechanical parts Patent
[NASA-CASE-MFS-14971] c15 N71-24984

DEMPSEY, T. K.

Ride quality meter
[NASA-CASE-LAR-12882-1] c54 N81-31848

DENACI, D. E.

Clamping assembly for inertial components Patent
[NASA-CASE-XMS-02184] c15 N71-20813

DEO, H.

Dual purpose momentum wheels for spacecraft with magnetic recording
[NASA-CASE-NPO-11481] c21 N73-13644

DERING, V. G.

Vortex breech high pressure gas generator
[NASA-CASE-LAR-10549-1] c31 N73-13898

DEER, L. J.

Direct radiation cooling of the collector of linear beam tubes
[NASA-CASE-XNP-09227] c15 N69-24319

Temperature-compensating means for cavity resonator of amplifier Patent
[NASA-CASE-XNP-00449] c14 N70-35220

Electron beam tube containing a multiple cathode array employing indexing means for cathode substitution Patent
[NASA-CASE-NPO-10625] c09 N71-26182

Thermostatic actuator
[NASA-CASE-NPO-10637] c15 N72-12409

Thermal motor
[NASA-CASE-NPO-11283] c09 N72-25260

Electrostatically controlled heat shutter
[NASA-CASE-NPO-11942-1] c33 N73-32818

DESCAMP, V. A.

Filter regeneration systems
[NASA-CASE-MSC-14273-1] c34 N75-33342

DESTRESE, J. G.

Thermionic tantalum emitter doped with oxygen Patent Application
[NASA-CASE-NPO-11138] c03 N70-34646

DETLING, J. R.

Retractable environmental seal
[NASA-CASE-MFS-23646-1] c37 N79-22474

DEWEILER, R. E.

High isolation RF signal selection switches
[NASA-CASE-NPO-13081-1] c33 N74-22814

DEVINE, D. J.

Electrical short locator
[NASA-CASE-ARC-11116-1] c33 N79-31498

DEVINE, R. J.

Optical tracker having overlapping reticles on parallel axes Patent
[NASA-CASE-XGS-05715] c23 N71-16100

DEWHIRST, D. L.

Deformable vehicle wheel Patent
[NASA-CASE-MFS-20400] c31 N71-18611

DEWITT, R. L.

Fluid coupling Patent
[NASA-CASE-XLE-00397] c15 N70-36492

DEYOUNG, R. J.
 Volumetric direct nuclear pumped laser
 [NASA-CASE-LAR-12183-1] c36 N79-18307
 Large volume multiple path nuclear pumped laser
 [NASA-CASE-LAR-12592-1] c36 N79-26385

DI LOSA, V. J.
 Diversity receiving system with diversity phase lock Patent
 [NASA-CASE-XGS-01222] c10 N71-20841

DIAMOND, D. D.
 Stator rotor tools
 [NASA-CASE-MSC-16000-1] c37 N78-24544

DIAMOND, R. M.
 Central spar and module joint Patent
 [NASA-CASE-XNP-02341] c15 N71-21531

DIBATTISTA, J. D.
 Determining particle density using known material Hugoniot curves
 [NASA-CASE-LAR-11059-1] c76 N75-12810
 Meteoroid impact position locator aid for manned space station
 [NASA-CASE-LAR-10629-1] c35 N75-33367

DICKENS, L. E.
 Millimeter wave pumped parametric amplifier
 [NASA-CASE-GSC-11617-1] c33 N74-32660

DICKERSON, G. E.
 Composite lamination method
 [NASA-CASE-LAR-12019-1] c24 N78-17150

DICKINSON, R. M.
 Microwave power converter
 [NASA-CASE-NPO-14068-1] c44 N78-15609
 Thin conformal antenna array for microwave power conversions
 [NASA-CASE-NPO-13886-1] c32 N78-24391
 RF beam center location method and apparatus for power transmission system
 [NASA-CASE-NPO-13821-1] c44 N78-28594
 Microwave power transmission beam safety system
 [NASA-CASE-NPO-14224-1] c33 N80-18287

DIETRICH, F. J.
 Amplitude steered array
 [NASA-CASE-GSC-11446-1] c33 N74-20860

DILL, W. P.
 Method and automated apparatus for detecting coliform organisms
 [NASA-CASE-MSC-16777-1] c51 N80-27067

DILLARD, P. A.
 Method of fabricating a photovoltaic module of a substantially transparent construction
 [NASA-CASE-NPO-14303-1] c44 N80-18550

DILLON, R. F., JR.
 Shock absorbing mount for electrical components
 [NASA-CASE-NPO-13253-1] c37 N75-18573

DIMEFF, J.
 Cryogenic apparatus for measuring the intensity of magnetic fields
 [NASA-CASE-XAC-02407] c14 N69-27423
 Apparatus for coupling a plurality of ungrounded circuits to a grounded circuit Patent
 [NASA-CASE-XAC-00086] c09 N70-33182
 Two-plane balance Patent
 [NASA-CASE-XAC-00073] c14 N70-34813
 Differential pressure cell Patent
 [NASA-CASE-XAC-00042] c14 N70-34816
 High speed low level electrical stepping switch Patent
 [NASA-CASE-XAC-00060] c09 N70-35915
 Dynamic sensor Patent
 [NASA-CASE-XAC-02877] c14 N70-41681
 Electrostatic charged particle analyzer having deflection members shaped according to the periodic voltage applied thereto Patent
 [NASA-CASE-XAC-05506-1] c24 N71-16095
 Inertial reference apparatus Patent
 [NASA-CASE-XAC-03107] c23 N71-16098
 Thermal detector of electromagnetic energy by means of a vibrating electrode Patent
 [NASA-CASE-XAC-10768] c09 N71-18830
 Vibrating element electrometer with output signal magnified over input signal by a function of the mechanical Q of the vibrating element Patent
 [NASA-CASE-XAC-02807] c09 N71-23021
 Wide range dynamic pressure sensor
 [NASA-CASE-ARC-10263-1] c14 N72-22438
 Nondispersive gas analyzing method and apparatus wherein radiation is serially passed through a reference and unknown gas
 [NASA-CASE-ARC-10308-1] c06 N72-31141

Chromato-fluorographic drug detector
 [NASA-CASE-ARC-10633-1] c25 N74-26947
 Diode-quad bridge circuit means
 [NASA-CASE-ARC-10364-3] c33 N75-19520
 Diode-quad bridge circuit means
 [NASA-CASE-ARC-10364-2] c33 N75-25041
 NDIR gas analyzer based on absorption modulation ratios for known and unknown samples
 [NASA-CASE-ARC-10802-1] c35 N75-36502
 Modulated hydrogen ion flame detector
 [NASA-CASE-ARC-10322-1] c35 N76-18403
 Method and apparatus for compensating reflection losses in a path length modulated absorption-absorption trace gas detector
 [NASA-CASE-ARC-10631-1] c74 N76-20958
 Nulling device for detection of trace gases by NDIR absorption
 [NASA-CASE-ARC-10760-1] c25 N76-22323
 Integrated structure vacuum tube
 [NASA-CASE-ARC-10445-1] c31 N76-31365
 Optically selective, acoustically resonant gas detecting transducer
 [NASA-CASE-ARC-10639-1] c35 N78-13400

DIX, M. G.
 Demodulation system Patent
 [NASA-CASE-XAC-04030] c10 N71-19472

DIXON, G. V.
 Active vibration isolator for flexible bodies Patent
 [NASA-CASE-LAR-10106-1] c15 N71-27169

DOBIES, E. F.
 Cyclically operable optical shutter
 [NASA-CASE-NPO-10758] c14 N73-14427

DOD, L. R.
 Plural beam antenna
 [NASA-CASE-GSC-11013-1] c09 N73-19234

DOGGETT, R. V., JR.
 Aeroelastic instability stoppers for wind-tunnel models
 [NASA-CASE-LAR-12720-1] c09 N81-31229
 Aeroelastic instability stoppers for wind-tunnel models
 [NASA-CASE-LAR-12458-1] c09 N81-31230

DOLEND, G. D.
 Method and apparatus for decoding compatible convolutional codes
 [NASA-CASE-MSC-14070-1] c32 N74-32598
 Secure communication system
 [NASA-CASE-MSC-16462-1] c32 N78-25274
 Phased array antenna control
 [NASA-CASE-MSC-14939-1] c32 N79-11264

DOLLAND, C. R.
 Combinational logic for generating gate drive signals for phase control rectifiers
 [NASA-CASE-MPS-25208-1] c33 N81-27402
 Adaptive control system for line-commutated inverters
 [NASA-CASE-MPS-25209-1] c33 N81-31480
 Adaptive reference voltage generator for firing angle control of line-commutated inverters
 [NASA-CASE-MPS-25215-1] c33 N81-31481

DOLLYHIGH, S. A.
 Metric half-span model support system
 [NASA-CASE-LAR-12441-1] c09 N80-24334

DONAS, P. A.
 Redundant disc
 [NASA-CASE-LEW-12496-1] c07 N78-33101

DONBROWSKI, H. G.
 Adjustable tension wire guide Patent
 [NASA-CASE-XMS-02383] c15 N71-15918

DONALDSON, R. W., JR.
 Gas chromatograph injection system
 [NASA-CASE-ARC-10344-2] c35 N75-26334

DONNELLY, P. C.
 Prevention of pressure build-up in electrochemical cells Patent
 [NASA-CASE-XGS-01419] c03 N70-41864

DONNINI, J. M.
 Hydrogen fire blink detector
 [NASA-CASE-MPS-15063] c14 N72-25412

DONOHUE, J. H.
 Passive dual spin misalignment compensators
 [NASA-CASE-GSC-11479-1] c35 N74-28097
 Active nutation controller
 [NASA-CASE-GSC-12273-1] c35 N80-21719

DONOVAN, B. P.
 Artificial gravity spin deployment system Patent
 [NASA-CASE-XNP-02595] c31 N71-21881

DOHOVAN, G.
Drying apparatus for photographic sheet material
[NASA-CASE-GSC-11074-1] c14 N73-28489

DOHOVAN, B. P.
Particulate and aerosol detector
[NASA-CASE-LAR-11434-1] c35 N76-22509

DOONG, H.
Analog to digital converter Patent
[NASA-CASE-XLA-00670] c08 N71-12501
Controllable high voltage source having fast
settling time
[NASA-CASE-GSC-11844-1] c33 N75-19522

DORNE, A.
Nose cone mounted heat resistant antenna Patent
[NASA-CASE-XMS-04312] c07 N71-22984

DOTSON, W. P., JR.
Digital to analog conversion apparatus
[NASA-CASE-MSC-12458-1] c08 N73-32081

DOTTS, B. L.
Thermal insulation protection means
[NASA-CASE-MSC-12737-1] c24 N79-25142
Improved attachment system for silica tiles
[NASA-CASE-MSC-18741-1] c16 N81-16110

DOUGHERTY, H. B.
Rotary solenoid shutter drive assembly and
rotary inertia damper and stop plate assembly
[NASA-CASE-GSC-11560-1] c33 N74-20861

DOUGHTY, R. A.
Automatic signal range selector for metering
devices Patent
[NASA-CASE-XMS-06497] c14 N71-26244

DOUGLAS, J.
Process of casting heavy slips Patent
[NASA-CASE-XLE-00106] c15 N71-16076

DOUGLAS, J. L.
Maximum power point tracker Patent
[NASA-CASE-GSC-10376-1] c14 N71-27407

DOH, M. B.
Vacuum pressure molding technique
[NASA-CASE-LAR-10073-1] c37 N76-24575

DOH, M. P.
Two component bearing Patent
[NASA-CASE-XLA-00013] c15 N71-25136

DOWLEE, W. L.
Solid propellant rocket motor nozzle
[NASA-CASE-NPO-11458] c28 N72-23810
Solid propellant rocket motor
[NASA-CASE-NPO-11559] c28 N73-24784
Seismic vibration source
[NASA-CASE-NPO-14112-1] c46 N79-22679

DOWNING, R. G.
Bonding machine for forming a solar array strip
[NASA-CASE-NPO-13652-2] c44 N79-24431

DOWNS, W. R.
Transpirationally cooled heat ablation system
Patent
[NASA-CASE-XMS-02677] c31 N70-42075
Method for obtaining oxygen from lunar or
similar soil
[NASA-CASE-MSC-12408-1] c46 N74-13011

DOYLE, J. C.
Measuring device Patent
[NASA-CASE-XMS-01546] c14 N70-40233

DREISBACH, F. R.
Film advance indicator
[NASA-CASE-LAR-12474-1] c35 N80-31774

DRESHFIELD, B. L.
Cobalt-base alloy
[NASA-CASE-LEW-10436-1] c17 N73-32415

DRESSER, H. S.
Multi-purpose wind tunnel reaction control model
block
[NASA-CASE-MSC-19706-1] c09 N78-31129

DREXHAGE, M. G.
Injection head for delivering liquid fuel and
oxidizers
[NASA-CASE-NPO-10046] c28 N72-17843

DREYFUS, M. G.
Wedge immersed thermistor bolometers
[NASA-CASE-XGS-01245-1] c35 N79-33449

DRISCOLL, K. L.
Means for accommodating large overstrain in lead
wires
[NASA-CASE-LAR-10168-1] c33 N74-22865

DROST, E. J.
Coal-shale interface detection
[NASA-CASE-MFS-23720-3] c43 N79-25443

DRUMMOND, A. S.
Flexible back-up bar Patent

[NASA-CASE-XMF-00722] c15 N70-40204

DU POIT, P. S.
Solar panel fabrication Patent
[NASA-CASE-XNP-03413] c03 N71-26726

DUBEY, M.
Central spar and module joint Patent
[NASA-CASE-XNP-02341] c15 N71-21531

DUBOIS, R. D.
Guide for a typewriter
[NASA-CASE-MFS-15218-1] c37 N77-19457

DUBUSKEE, W.
Apparatus for welding sheet material
[NASA-CASE-XMS-01330] c37 N75-27376

DUFFY, J. O.
Minimal logic block encoder Patent
[NASA-CASE-NFO-10595] c10 N71-25917

DUNABETZ, R. A.
Flexible, repairable, pottable material for
electrical connectors Patent
[NASA-CASE-IGS-05180] c18 N71-25881

DUNAVANT, J. C.
Hot air balloon deceleration and recovery system
Patent
[NASA-CASE-XLA-06824-2] c02 N71-11037

DUNN, J. G.
Satellite interlace synchronization system
[NASA-CASE-GSC-10390-1] c07 N72-11149

DUNN, J. H.
Foldable conduit Patent
[NASA-CASE-XLE-00620] c32 N70-41579

DUNN, S. T.
Ellipsoidal mirror reflectometer including means
for averaging the radiation reflected from the
sample Patent
[NASA-CASE-IGS-05291] c23 N71-16341

DUNN, W. P.
Water separator
[NASA-CASE-XMS-01295-1] c37 N79-21345

DUNN, W. R.
Coaxial inverted geometry transistor having
buried emitter
[NASA-CASE-ABC-10330-1] c09 N73-32112

DUNNAVANT, W. R.
Process for preparation of dianilinosilanes Patent
[NASA-CASE-XMF-06409] c06 N71-23230
Process for preparation of high-molecular-
weight polyaryloxysilanes Patent
[NASA-CASE-XMF-08674] c06 N71-28807

DUNNING, J. W., JR.
Slug flow magnetohydrodynamic generator
[NASA-CASE-XLE-02083] c03 N69-39983

DUPRAV, W. A.
Analytical test apparatus and method for
determining oxide content of alkali metal Patent
[NASA-CASE-XLE-01997] c06 N71-23527

DURAN, E. E.
Subminiature insertable force transducer
[NASA-CASE-NPO-13423-1] c33 N75-31329
Miniature muscle displacement transducer
[NASA-CASE-NFO-13519-1] c33 N76-19338

DURNEY, G. P.
Space suit
[NASA-CASE-MSC-12609-1] c05 N73-32012

DUSTIN, M. O.
Pneumatic oscillator Patent
[NASA-CASE-LEW-10345-1] c10 N71-25899
Shock position sensor for supersonic inlets
[NASA-CASE-LEW-11915-1] c35 N76-14431

DWINELL, W. S.
System for automatically switching transformer
coupled lines
[NASA-CASE-MSC-16697-1] c33 N79-28415

E

EASLEY, W. C.
Resonant waveguide stark cell
[NASA-CASE-LAR-11352-1] c33 N75-26245

EASTERLING, M. E.
Baseband signal combiner for large aperture
antenna array
[NASA-CASE-NPO-14641-1] c32 N81-29308

EASTERLING, M. P.
Radar ranging receiver Patent
[NASA-CASE-XNP-00748] c07 N70-36911
Phase-locked loop with sideband rejecting
properties Patent
[NASA-CASE-XNF-02723] c07 N70-41680

Time synchronization system utilizing moon reflected coded signals Patent
[NASA-CASE-NPO-10143] c10 N71-26326

Two carrier communication system with single transmitter
[NASA-CASE-NPO-11548] c07 N73-26118

Radio frequency arraying method for receivers
[NASA-CASE-NPO-14328-1] c32 N80-16253

EASTON, R. A.
Data multiplexer using tree switching configuration
[NASA-CASE-NPO-11333] c08 N72-22162

Flexible computer accessed telemetry
[NASA-CASE-NPO-11358] c07 N72-25172

EATON, L. R.
Heat transfer device
[NASA-CASE-MFS-22938-1] c34 N76-18374

EBBERSOLE, T. J.
Inverter ratio failure detector
[NASA-CASE-NFO-13160-1] c35 N74-18090

EBIHARA, B. T.
Thermal radiation shielding Patent
[NASA-CASE-XLE-03432] c33 N71-24145

EBY, R. J.
Thermal control system for a spacecraft modular housing
[NASA-CASE-GSC-11018-1] c31 N73-3C829

ECKERT, E. R. G.
Transpiration cooled turbine blade manufactured from wires Patent
[NASA-CASE-XLE-00020] c15 N70-33226

ECKLES, P. M.
High-speed infrared furnace
[NASA-CASE-XLE-10466] c17 N69-25147

ECONOMU, M. A.
Wire stripper
[NASA-CASE-FRC-10111-1] c37 N75-1C419

Air speed and attitude probe
[NASA-CASE-FRC-11009-1] c06 N80-18036

ECORD, G. E.
Densification of porous refractory substrates
[NASA-CASE-MSC-18737-1] c25 N81-29180

Method of repairing surface damage to porous refractory substrates
[NASA-CASE-MSC-18736-1] c27 N81-29231

EDDINS, T. O.
Space craft soft landing system Patent
[NASA-CASE-XMF-02108] c31 N70-36845

Missile launch release system Patent
[NASA-CASE-XMF-03198] c30 N70-40353

EDLESON, S. K.
Latch/ejector unit Patent
[NASA-CASE-XLA-03538] c15 N71-24897

EDMAN, C. W.
Electrical switching device Patent
[NASA-CASE-NPO-10037] c09 N71-19610

EDWARDS, G. G.
Flight craft Patent
[NASA-CASE-XAC-02058] c02 N71-16087

EDWARDS, J. W.
Apparatus for damping operator induced oscillations of a controlled system
[NASA-CASE-FRC-11041-1] c33 N80-2C488

EDWARDS, T. R.
Filtering device
[NASA-CASE-MFS-22729-1] c32 N76-21366

EGGER, R. L.
Strain gage Patent Application
[NASA-CASE-FRC-10053] c14 N70-35587

EGGERS, A. J., JR.
Flight craft Patent
[NASA-CASE-XAC-02058] c02 N71-16087

EGLI, P. H.
Method of forming transparent films of ZnO
[NASA-CASE-FRC-10019] c15 N73-12487

EHRENFELD, D. A.
Excitation and detection circuitry for a flux responsive magnetic head
[NASA-CASE-XNP-04183] c09 N69-24329

Incremental tape recorder and data rate converter Patent
[NASA-CASE-XNP-02778] c08 N71-22710

RICHHRENNER, F. F.
Hydraulic grip Patent
[NASA-CASE-XLA-05100] c15 N71-17696

Light shield and infrared reflector for fatigue testing Patent
[NASA-CASE-XLA-01782] c14 N71-26136

Anti-buckling fatigue test assembly
[NASA-CASE-LAR-10426-1] c09 N74-19528

RICHTENHAL, J.
Wide angle long eye relief eyepiece Patent
[NASA-CASE-XMS-06056-1] c23 N71-24857

RISENBERGER, I.
Data compressor Patent
[NASA-CASE-XNP-04067] c08 N71-22707

EL-ASSER, M. S.
Process for preparation of large-particle-size monodisperse latexes
[NASA-CASE-MFS-25000-1] c25 N81-19242

ELACHI, C.
Acoustically controlled distributed feedback laser
[NASA-CASE-NFO-13175-1] c36 N75-31427

Diffused waveguiding capillary tube with distributed feedback for a gas laser
[NASA-CASE-NFO-13544-1] c36 N76-18428

Fiber distributed feedback laser
[NASA-CASE-NFO-13531-1] c36 N76-24553

Distributed feedback acoustic surface wave oscillator
[NASA-CASE-NFO-13673-1] c71 N77-26919

ELBER, W.
Means for controlling aerodynamically induced twist
[NASA-CASE-LAR-12175-1] c05 N80-16055

Partial interlaminar separation system for composites
[NASA-CASE-LAR-12065-1] c24 N81-14000

Method of making a partial interlaminar separation composite system
[NASA-CASE-LAR-12065-2] c24 N81-33235

ELDER, H. D.
Internal flare angle gauge Patent
[NASA-CASE-XMF-04415] c14 N71-24693

ELIA, A. D.
Monopulse system with an electronic scanner
[NASA-CASE-XGS-05582] c07 N69-27460

ELIASON, J. T.
Photovoltaic cell array
[NASA-CASE-MFS-22458-1] c44 N77-10635

ELKINS, W.
Flexible joint for pressurizable garment
[NASA-CASE-MSC-11072] c54 N74-32546

Liquid cooled brassiere and method of diagnosing malignant tumors therewith
[NASA-CASE-ARC-11007-1] c52 N77-14736

ELLEMAN, D. D.
Continuous magnetic flux pump
[NASA-CASE-XNP-01187] c15 N73-28516

Superconductive magnetic-field-trapping device
[NASA-CASE-XNP-01185] c26 N73-28710

Magnetic-flux pump
[NASA-CASE-XNP-01188] c15 N73-32361

Material suspension within an acoustically excited resonant chamber
[NASA-CASE-NFO-13263-1] c12 N75-24774

Heat operated cryogenic electrical generator
[NASA-CASE-NFO-13303-1] c20 N75-24837

Magnetometer using superconducting rotating body
[NASA-CASE-NPO-13388-1] c35 N76-16390

Acoustic energy shaping
[NASA-CASE-NPO-13802-1] c71 N78-10837

Method and apparatus for producing concentric hollow spheres
[NASA-CASE-NPO-14596-1] c31 N81-33319

ELLERN, W. E.
Method of evaluating moisture barrier properties of encapsulating materials Patent
[NASA-CASE-NPO-10051] c18 N71-24934

ELLIOTT, D. G.
Magnetohydrodynamic induction machine
[NASA-CASE-XNP-07481] c25 N69-21929

Two-fluid magnetohydrodynamic system and method for thermal-electric power conversion Patent
[NASA-CASE-XNP-00644] c03 N70-36803

Two phase flow system with discrete impinging two-phase jets
[NASA-CASE-NPO-11556] c12 N72-25292

Method and turbine for extracting kinetic energy from a stream of two-phase fluid
[NASA-CASE-NFO-14130-1] c34 N79-20335

Improved method for driving two-phase turbines with enhanced efficiency
[NASA-CASE-NPO-15037-1] c37 N80-26660

ELLIOTT, R. L.
Preparation of ordered poly /arylenesiloxane/ polymers

[NASA-CASE-XMF-10753] c06 N71-11237
Fluorinated esters of polycarboxylic acids
[NASA-CASE-MPS-21040-1] c06 N73-3C098

ELLIS, D. B.
Integrated lift/drag controller for aircraft
[NASA-CASE-ARC-10456-1] c05 N75-12930

ELLIS, H., JR.
Complementary cross-slot phased array antenna
[NASA-CASE-MSC-18532-1] c32 N80-29543
Coaxial phased array antenna
[NASA-CASE-MSC-16800-1] c32 N81-14187

ELLIS, S. G.
Simple method of making photovoltaic junctions
Patent
[NASA-CASE-XNP-01960] c09 N71-23027
Method of electrolytically binding a layer of
semiconductors together Patent
[NASA-CASE-XNP-01959] c26 N71-23043
Method of changing the conductivity of vapor
deposited gallium arsenide by the introduction
of water into the vapor deposition atmosphere
Patent
[NASA-CASE-XNP-01961] c26 N71-29156

EHDE, W. D.
Etching of aluminum for bonding Patent
[NASA-CASE-XNP-02303] c17 N71-23828

EMERY, J. C.
Laser grating interferometer Patent
[NASA-CASE-XLA-04295] c16 N71-24170

ENGEL, A.
Digital video display system using cathode ray
tube
[NASA-CASE-NPO-11342] c09 N72-25248
Symmetrical odd-modulus frequency divider
[NASA-CASE-NPO-13426-1] c33 N75-31330
Digital data reformatter/deserializer
[NASA-CASE-NPO-13676-1] c60 N79-20751

ENGLAND, C.
Hydrogen-bromine secondary battery
[NASA-CASE-NPO-13237-1] c44 N76-18641
Zinc-halide battery with molten electrolyte
[NASA-CASE-NPO-11961-1] c44 N76-18643

ENGLAR, K. G.
Artificial gravity spin deployment system Patent
[NASA-CASE-XNP-02595] c31 N71-21881

ENIE, B. B.
Method of repairing discontinuity in fiberglass
structures
[NASA-CASE-LAR-10416-1] c24 N74-3C001

ENRIQUEZ, E. A.
System for synchronizing synthesizers of
communication systems
[NASA-CASE-GSC-12148-1] c32 N79-20296

ENSTROM, R. E.
Water cooled contactor for anode in carbon arc
mechanism
[NASA-CASE-XMS-03700] c15 N69-24266

EPPS, C. H., JR.
Locking mechanism for orthopedic braces
[NASA-CASE-GSC-12082-1] c54 N76-22914
Locking mechanism for orthopedic braces
[NASA-CASE-GSC-12082-2] c52 N81-25661

EPSTEIN, J.
Segmenting lead telluride-silicon germanium
thermoelements Patent
[NASA-CASE-XGS-05718] c26 N71-16037
Tungsten contacts on silicon substrates
[NASA-CASE-GSC-10695-1] c09 N72-25259

EPSTEIN, P.
Drying apparatus for photographic sheet material
[NASA-CASE-GSC-11074-1] c14 N73-28489

ERB, R. B.
Heat shield Patent
[NASA-CASE-XMS-00486] c33 N70-33344

BRICKSON, W. D.
Hypersonic test facility Patent
[NASA-CASE-XLA-00378] c11 N71-15925
Hypersonic test facility Patent
[NASA-CASE-XLA-05378] c11 N71-21475
Ablation article and method
[NASA-CASE-LAR-10439-1] c33 N73-27796

ERPENBACH, H.
Means and methods of depositing thin films on
substrates Patent
[NASA-CASE-XNP-00595] c15 N70-34967
Process for reducing secondary electron emission
Patent
[NASA-CASE-XNP-09469] c24 N71-25555

Method of producing a storage bulb for an atomic
hydrogen maser
[NASA-CASE-NFO-13050-1] c36 N75-15029

ERRETT, D. D.
Canopus detector including automotive gain
control of photomultiplier tube Patent
[NASA-CASE-XNP-03914] c21 N71-10771

ESCHER, W. J. D.
Attitude and propellant flow control system and
method Patent
[NASA-CASE-XMF-00185] c21 N70-34539
Composite powerplant and shroud therefor Patent
[NASA-CASE-XLA-01043] c28 N71-10780
Injector assembly for liquid fueled rocket
engines Patent
[NASA-CASE-XMF-00968] c28 N71-15660

ESGAR, J. B.
Thin-walled pressure vessel Patent
[NASA-CASE-XLE-04677] c15 N71-10577
Ophthalmic liquifaction pump
[NASA-CASE-LEW-12051-1] c52 N75-33640

ESKENAZI, R.
Tactile sensing system
[NASA-CASE-NFO-15094-1] c33 N81-16386

ESKEW, M. H., JR.
Random function tracer Patent
[NASA-CASE-XLA-01401] c15 N71-21179

ESPI, P. B.
Coaxial high density, hypervelocity plasma
generator and accelerator with ionizable metal
disc
[NASA-CASE-MPS-20589] c25 N72-32688

ESTES, E. G.
Rocket nozzle test method Patent
[NASA-CASE-NPO-10311] c31 N71-15643

ESTES, H. F.
Apparatus for making diamonds
[NASA-CASE-MFS-20698] c15 N72-20446
Process for making diamonds
[NASA-CASE-MFS-20698-2] c15 N73-19457

ESTEY, R. S.
Method and apparatus for precision control of
radiometer
[NASA-CASE-NFO-15398-1] c35 N81-33449

ESTRELLA, C.
Adjustable high emittance gap filler
[NASA-CASE-ARC-11310-1] c27 N80-23454

ESTRELLA, C. A.
Catalysts for polyimide foams from aromatic
isocyanates and aromatic dianhydrides
[NASA-CASE-ARC-11107-1] c25 N80-16116

ETSION, I.
Cantilever mounted resilient pad gas bearing
[NASA-CASE-LEW-12569-1] c37 N79-10418
Modified face seal for positive film stiffness
[NASA-CASE-LEW-12989-1] c37 N80-12414
Self-stabilizing radial face seal
[NASA-CASE-LEW-12991-1] c37 N81-24442

ETZEL, J. G.
Laser measuring system for incremental assemblies
[NASA-CASE-GSC-12321-1] c36 N80-18380

EUBANKS, A. G.
Device for measuring electron-beam intensities
and for subjecting materials to electron
irradiation in an electron microscope
[NASA-CASE-XGS-01725] c14 N69-39982
Foamed in place ceramic refractory insulating
material Patent
[NASA-CASE-XGS-02435] c18 N71-22998

EULITZ, W. R.
Slosh suppressing device and method Patent
[NASA-CASE-XMF-00658] c12 N70-38997

EVANS, D. D.
Ignition means for monopropellant Patent
[NASA-CASE-XNP-00876] c28 N70-41311

EVANS, D. G.
Multistage multiple-reentry turbine Patent
[NASA-CASE-XLE-00170] c15 N70-36412
Multistage multiple-reentry turbine Patent
[NASA-CASE-XLE-00085] c28 N70-39895

EVANS, E. R.
Strain sensor for high temperatures Patent
[NASA-CASE-XNP-09205] c14 N71-17657

EVANS, F. D.
Autoignition test cell Patent
[NASA-CASE-KSC-10198] c11 N71-28629

EVANS, G. A.
Fiber distributed feedback laser
[NASA-CASE-NPO-13531-1] c36 N76-24553

EVANS, H. E.
 Energy storage apparatus
 [NASA-CASE-GSC-12030-1] c44 N78-24608
 EVANS, J.
 Millimeter wave antenna system Patent Application
 [NASA-CASE-GSC-10949-1] c07 N71-28965
 Solenoid valve including guide for armature and
 valve member
 [NASA-CASE-GSC-10607-1] c15 N72-20442
 Mutation damper
 [NASA-CASE-GSC-11205-1] c15 N73-25513
 EVANS, J. C., JR.
 Rapidly pulsed, high intensity, incoherent light
 source
 [NASA-CASE-XLE-2529-3] c33 N74-20859
 High power laser apparatus and system
 [NASA-CASE-XLE-2529-2] c36 N75-27364
 Solar cell collector
 [NASA-CASE-LEW-12552-1] c44 N78-25527
 Method for producing solar energy panels by
 automation
 [NASA-CASE-LEW-12541-1] c44 N78-25529
 Solar cell system having alternating current
 output
 [NASA-CASE-LEW-12806-1] c44 N78-25553
 Solar cells having integral collector grids
 [NASA-CASE-LEW-12819-1] c44 N79-11467
 Application of semiconductor diffusants to solar
 cells by screen printing
 [NASA-CASE-LEW-12775-1] c44 N79-11468
 Solar cell collector and method for producing same
 [NASA-CASE-LEW-12552-2] c44 N79-11472
 Method for fabricating solar cells having
 integrated collector grits
 [NASA-CASE-LEW-12819-2] c44 N79-18444
 Solar cell system having alternating current
 output
 [NASA-CASE-LEW-12806-2] c44 N81-12542
 High voltage planar multijunction
 [NASA-CASE-LEW-13400-1] c44 N81-16528
 High voltage V-groove solar cell
 [NASA-CASE-LEW-13401-1] c44 N81-16529
 Heat transparent high intensity high efficiency
 solar cell
 [NASA-CASE-LEW-12892-1] c44 N81-27598
 EVANS, J. M., JR.
 System and method for tracking a signal source
 [NASA-CASE-HQN-10880-1] c17 N78-17140
 EVANS, P. K.
 Device for tensioning test specimens within an
 hermetically sealed chamber
 [NASA-CASE-MFS-23281-1] c35 N77-22450
 EVENSEN, D. A.
 Buoyant anti-slosh system Patent
 [NASA-CASE-XLA-04605] c32 N71-16106
 EYVARD, J. C.
 Ophthalmic method and apparatus
 [NASA-CASE-LEW-11669-1] c05 N73-27062
 EWE, H. I.
 Method and means for providing an absolute power
 measurement capability Patent
 [NASA-CASE-ERC-11020] c14 N71-26774
 Clear air turbulence detector
 [NASA-CASE-ERC-10081] c14 N72-28437
 EXTON, R. J.
 Stack plume visualization system
 [NASA-CASE-LAR-11675-1] c45 N76-17656
 TV fatigue crack monitoring system
 [NASA-CASE-LAR-11490-1] c39 N78-16387
 EZEKIEL, P. D.
 Fluid power transmitting gas bearing Patent
 [NASA-CASE-ERC-10097] c15 N71-28465

F
 FAETH, P. A.
 Automatic recording McLeod gauge Patent
 [NASA-CASE-XLE-03280] c14 N71-23093
 FAGET, M. A.
 Survival couch Patent
 [NASA-CASE-XLA-00118] c05 N70-33285
 Aerial capsule emergency separation device Patent
 [NASA-CASE-XLA-00115] c03 N70-33343
 Space capsule Patent
 [NASA-CASE-XLA-00149] c31 N70-37938
 Space capsule Patent
 [NASA-CASE-XLA-01332] c31 N71-15664
 Space shuttle vehicle and system
 [NASA-CASE-MSC-12433] c31 N73-14854
 Space vehicle system
 [NASA-CASE-MSC-12561-1] c18 N76-17185
 FAGOT, R. J.
 Gas low pressure low flow rate metering system
 Patent
 [NASA-CASE-FRC-10022] c12 N71-26546
 Respiration monitor
 [NASA-CASE-FRC-10012] c14 N72-17329
 FARRAH, J. C.
 Superconducting alternator
 [NASA-CASE-XLE-02824] c03 N69-39890
 Superconducting alternator Patent
 [NASA-CASE-XLE-02823] c09 N71-23443
 FALBEL, G.
 Multi-lobar scan horizon sensor Patent
 [NASA-CASE-IGS-00809] c21 N70-35427
 FALES, C. L., JR.
 Magnetometer with a miniature transducer and
 automatic scanning
 [NASA-CASE-LAR-11617-2] c35 N78-32397
 FALK, W. C.
 Miniature vibration isolator Patent
 [NASA-CASE-XLA-01019] c15 N70-40156
 Canister closing device Patent
 [NASA-CASE-XLA-01446] c15 N71-21528
 FANG, P.
 Recovery of radiation damaged solar cells
 through thermal annealing
 [NASA-CASE-IGS-04047-2] c03 N72-11062
 FARRIN, B. B.
 System for the measurement of ultra-low stray
 light levels
 [NASA-CASE-MFS-23513-1] c74 N79-11865
 FARNSWORTH, D. L.
 Phototransistor imaging system
 [NASA-CASE-MFS-20809] c23 N73-13660
 Solid-state current transformer
 [NASA-CASE-MFS-22560-1] c33 N77-14335
 FARNSWORTH, P. D.
 Space simulation and radiative property testing
 system and method Patent
 [NASA-CASE-MFS-20096] c14 N71-30026
 FARRELL, R.
 Lead attachment to high temperature devices
 [NASA-CASE-ERC-10224] c09 N72-25261
 Wide temperature range electronic device with
 lead attachment
 [NASA-CASE-ERC-10224-2] c09 N73-27150
 FARRIS, C. D.
 Storage battery comprising negative plates of a
 wedge shaped configuration
 [NASA-CASE-NFO-11806-1] c44 N74-19693
 FARTHING, W. H.
 Device for determining relative angular position
 between a spacecraft and a radiation emitting
 celestial body
 [NASA-CASE-GSC-11444-1] c14 N73-28490
 FASSBENDER, A. G.
 Electrical conductivity cell and method for
 fabricating the same
 [NASA-CASE-ARC-10810-1] c33 N76-19339
 PAULKNER, R. D.
 Bonding graphite with fused silver chloride
 [NASA-CASE-XGS-00963] c15 N69-39735
 FAY, R. J.
 Metal shearing energy absorber
 [NASA-CASE-HQN-10638-1] c15 N73-30460
 FRAKES, P.
 Gauge calibration by diffusion
 [NASA-CASE-IGS-07752] c14 N73-30390
 FRALEY, R. D.
 Bacteria detection instrument and method
 [NASA-CASE-GSC-11533-1] c14 N73-13435
 FRANKENHOUGH, H. T.
 Parallel-plate viscometer with double diaphragm
 suspension
 [NASA-CASE-NFO-11387] c14 N73-14429
 FEATHERSTON, A. B.
 Method of fluxless brazing and diffusion bonding
 of aluminum containing components
 [NASA-CASE-MSC-14435-1] c37 N76-18455
 FEDOR, J. V.
 Stretch de-spin mechanism Patent
 [NASA-CASE-IGS-00619] c30 N70-40016
 FEDORS, R. F.
 Parallel-plate viscometer with double diaphragm
 suspension
 [NASA-CASE-NFO-11387] c14 N73-14429

Photomechanical transducer
[NASA-CASE-NPO-14363-1] c39 N81-25400

FEHRENKAMP, L. G.
Surface finishing
[NASA-CASE-MSC-12631-1] c24 N77-28225
Surface finishing
[NASA-CASE-MSC-12631-3] c27 N81-14077

FEILER, C. E.
Control of transverse instability in rocket
combustors Patent
[NASA-CASE-XLE-04603] c33 N71-21507

FEINBERG, P. M.
Digital telemetry system Patent
[NASA-CASE-XGS-01812] c07 N71-23001
Programmable telemetry system Patent
[NASA-CASE-GSC-10131-1] c07 N71-24624

FEINSTEIN, L.
Microwave flaw detector Patent
[NASA-CASE-ARC-10009-1] c15 N71-17822
Method and apparatus for swept-frequency
impedance measurements of welds
[NASA-CASE-ARC-10176-1] c15 N72-21464

FEINSTEIN, S. P.
Viscosity measuring instrument
[NASA-CASE-NPO-14501-1] c35 N80-18357

FELDSTEIN, C.
Subminiature insertable force transducer
[NASA-CASE-NPO-13423-1] c33 N75-31329
Miniature muscle displacement transducer
[NASA-CASE-NPO-13519-1] c33 N76-19338
Myocardium wall thickness transducer and
measuring method
[NASA-CASE-NPO-13644-1] c52 N76-25895
Catheter tip force transducer for cardiovascular
research
[NASA-CASE-NPO-13643-1] c52 N76-25896
Apparatus and method of inserting a
microelectrode in body tissue or the like
using vibration means
[NASA-CASE-NPO-13910-1] c52 N79-27836
Simultaneous muscle force and displacement
transducer
[NASA-CASE-NPO-14212-1] c52 N80-27072
Multifunctional transducer
[NASA-CASE-NPO-14329-1] c52 N81-20703
System for moving a probe to follow movements of
tissue
[NASA-CASE-NPO-15197-1] c52 N81-26697

FELL, D. M.
Flexible pile thermal barrier insulator
[NASA-CASE-MSC-19568-1] c34 N78-25350

FELTNER, W. R.
Multilevel metallization method for fabricating
a metal oxide semiconductor device
[NASA-CASE-MFS-23541-1] c76 N75-14906
Method of construction of a multi-cell solar array
[NASA-CASE-MFS-23540-1] c44 N79-26475

FENG, S. Y.
Regulated dc-to-dc converter for voltage step-up
or step-down with input-output isolation
[NASA-CASE-HQN-10792-1] c33 N74-11049

FENTRESS, C. E.
Expanding center probe and drogue Patent
[NASA-CASE-XMS-03613] c31 N71-16346

FENWICK, J. R.
Accumulator
[NASA-CASE-MFS-19287-1] c34 N77-30399

FERGUSON, R. E.
Two-step rocket engine bipropellant valve Patent
[NASA-CASE-XMS-04890-1] c15 N70-22192

FERRARA, L. J.
Collapsible Apollo couch
[NASA-CASE-MSC-13140] c05 N72-11085

FESSLER, T. E.
Thin window, drifted silicon, charged particle
detector
[NASA-CASE-XLE-10529] c14 N69-23191
Method of forming thin window drifted silicon
charged particle detector Patent
[NASA-CASE-XLE-00808] c24 N71-10560

FEWELL, L. L.
Carboranycyclotriphosphazenes and their polymers
[NASA-CASE-ARC-11176-1] c27 N80-21533
Process for the preparation of
polycarboranycyclotriphosphazenes
[NASA-CASE-ARC-11176-2] c27 N81-27271

FIELDS, S. A.
Device and method for determining X ray
reflection efficiency of optical surfaces

[NASA-CASE-MFS-20243] c23 N73-13662

FIET, O. O.
Electrohydrodynamic control valve Patent
[NASA-CASE-NPO-10416] c12 N71-27332

FIGGINS, D. A.
Adaptive system and method for signal generation
Patent
[NASA-CASE-GSC-11367] c10 N71-26374

FILIP, G. L.
Storage container for electronic devices Patent
[NASA-CASE-MFS-20075] c09 N71-26133
Method of coating through-holes Patent
[NASA-CASE-XMF-05999] c15 N71-29032

FINDL, E.
Electrolytically regenerative hydrogen-oxygen
fuel cell Patent
[NASA-CASE-XLE-04526] c03 N71-11052

FINK, J. W.
Bus voltage compensation circuit for controlling
direct current motor
[NASA-CASE-XMS-04215-1] c09 N69-39987

FINKB, E. C.
Electrode and insulator with shielded dielectric
junction
[NASA-CASE-XLE-03778] c09 N69-21542
Pressure monitoring with a plurality of
ionization gauges controlled at a central
location Patent
[NASA-CASE-XLE-00787] c14 N71-21090

FINLEY, T. D.
Split range transducer
[NASA-CASE-XLA-11189] c10 N72-20222

FINLEY, W. R.
Analog-to-digital converter
[NASA-CASE-MSC-13110-1] c08 N72-22163

FINNIE, C. J.
Insertion loss measuring apparatus having
transformer means connected across a pair of
bolometers Patent
[NASA-CASE-XNP-01193] c10 N71-16057

FISCHELL, D. R.
A cervix-to-rectum measuring device in a
radiation applicator for use in the treatment
of cervical cancer
[NASA-CASE-GSC-12081-2] c52 N77-26796

FISCHER, J. A.
Adjustable tension wire guide Patent
[NASA-CASE-XMS-02383] c15 N71-15918

FISCHER, J. B.
Interleaving device
[NASA-CASE-GSC-12111-2] c33 N81-29342

FISH, D. C.
Spin forming tubular elbows Patent
[NASA-CASE-XMF-01083] c15 N71-22723

FISH, R. H.
Fiber modified polyurethane foam for ballistic
protection
[NASA-CASE-ARC-10714-1] c27 N76-15310

FISH, R. H.
Auditory display for the blind
[NASA-CASE-HQN-10832-1] c71 N74-21014

FISHER, A.
Process for making RF shielded cable connector
assemblies and the products formed
thereby
[NASA-CASE-GSC-11215-1] c09 N73-28083

FITCH, E. J.
Modulator for tone and binary signals
[NASA-CASE-GSC-11743-1] c32 N75-24981

FITTING, R. C.
Phase modulator Patent
[NASA-CASE-MSC-13201-1] c07 N71-28429

FITTON, J. A., JR.
Multiple orifice throttle valve Patent
[NASA-CASE-XNP-09698] c15 N71-18580

FITZER, G. E.
Machine for use in monitoring fatigue life for a
plurality of elastomeric specimens
[NASA-CASE-NPO-13731-1] c39 N78-10493

FITZGERALD, D. J.
Ion thruster with a combination keeper electrode
and electron baffle
[NASA-CASE-NPO-11880] c28 N73-24783
Plasma igniter for internal combustion engine
[NASA-CASE-NPO-13828-1] c37 N79-11405

FITZGERALD, J. J.
Flow test device
[NASA-CASE-XMS-04917] c14 N69-24257

FITZGERALD, J. W.
Visual examination apparatus

[NASA-CASE-ARC-10329-1] c05 N73-26072
 Visual examination apparatus
 [US-PATENT-RE-28,921] c52 N76-3C793

FITZGERALD, T. M.
 A solid state acoustic variable time delay line
 Patent
 [NASA-CASE-ERC-10032] c10 N71-25900

FITZMAURICE, M. M.
 Retrodirective modulator Patent
 [NASA-CASE-GSC-10062] c14 N71-15605
 Apparatus for simulating optical transmission
 links
 [NASA-CASE-GSC-11877-1] c74 N76-18913
 Polarization compensator for optical
 communications
 [NASA-CASE-GSC-11782-1] c74 N76-30053

FLAGGE, B.
 Vibrating structure displacement measuring
 instrument Patent
 [NASA-CASE-XLA-03135] c32 N71-16428
 Arbitrarily shaped model survey system Patent
 [NASA-CASE-LAR-10098] c32 N71-26681
 Electro-mechanical sine/cosine generator
 [NASA-CASE-LAR-10503-1] c09 N72-21248
 Measuring probe position recorder
 [NASA-CASE-LAR-10806-1] c35 N74-32877
 Electro-mechanical sine/cosine generator
 [NASA-CASE-LAR-11389-1] c33 N77-26387
 Displacement probes with self-contained exciting
 medium
 [NASA-CASE-LAR-11690-1] c35 N80-14371

FLAHERTY, R.
 Thermally cascaded thermoelectric generator
 [NASA-CASE-NPO-10753] c03 N72-26031

FLANN, D. L.
 Electric discharge for treatment of trace
 contaminants
 [NASA-CASE-ARC-10975-1] c33 N79-15245

FLANNERY, E. J.
 Method and apparatus for controllably heating
 fluid Patent
 [NASA-CASE-XMF-04237] c33 N71-16278

FLATAU, C. E.
 Variable ratio mixed-mode bilateral master-slave
 control system for shuttle remote manipulator
 system
 [NASA-CASE-MSC-14245-1] c18 N75-27041

FLATTAU, T.
 Wideband heterodyne receiver for laser
 communication system
 [NASA-CASE-GSC-12053-1] c32 N77-28346

FLEETWOOD, C. E.
 Method of forming a sharp edge on an optical
 device
 [NASA-CASE-GSC-12348-1] c74 N80-24149

FLEETWOOD, C. E., JR.
 Method of treating the surface of a glass member
 [NASA-CASE-GSC-12110-1] c27 N77-32308

FLEISCHMAN, G. L.
 Flat-plate heat pipe
 [NASA-CASE-GSC-11998-1] c34 N77-32413

FLETCHER, E. A.
 Apparatus for igniting solid propellants Patent
 [NASA-CASE-XLE-00207] c28 N70-33375
 Method of igniting solid propellants Patent
 [NASA-CASE-XLE-01988] c27 N71-15634

FLETCHER, I. L.
 Satellite interlace synchronization system
 [NASA-CASE-GSC-10390-1] c07 N72-11149

FLETCHER, J. C.
 Heat flow calorimeter
 [NASA-CASE-GSC-11434-1] c34 N74-27859

FLETCHER, W. E.
 Field effect transistor and method of
 construction thereof
 [NASA-CASE-MPS-23312-1] c33 N78-27326

FLIPPIN, A.
 Sun angle calculator
 [NASA-CASE-MSC-12617-1] c35 N76-29552

FLORES, A. L.
 Field ionization electrodes Patent
 [NASA-CASE-ERC-10013] c09 N71-26678

FLOYD, E. L.
 High impact pressure regulator Patent
 [NASA-CASE-NPO-10175] c14 N71-18625

FOGAL, G. L.
 Automatic bio waste sampling
 [NASA-CASE-MSC-14640-1] c54 N76-14804

Fluid mass sensor for a zero gravity environment
 [NASA-CASE-MSC-14653-1] c35 N77-19385

FOBLE, G. M.
 Intumescent paints Patent
 [NASA-CASE-ARC-10099-1] c18 N71-15469
 Transparent fire resistant polymeric structures
 [NASA-CASE-ARC-10813-1] c27 N76-16230
 Phosphorus-containing bisimide resins
 [NASA-CASE-ARC-11321-1] c27 N81-27272
 Phosphorus-containing imide resins
 [NASA-CASE-ARC-11368-1] c27 N81-31364

FONTANA, A.
 Solar sensor having coarse and fine sensing with
 matched preirradiated cells and method of
 selecting cells Patent
 [NASA-CASE-XLA-01584] c14 N71-23269

FONTES, M. J.
 Method for making patterns for resin matrix
 composites
 [NASA-CASE-ARC-11246-1] c24 N80-22410

FOOTE, R. E.
 Adaptive system and method for signal generation
 Patent
 [NASA-CASE-GSC-11367] c10 N71-26374

FORBES, S. G.
 Apparatus for field strength measurement of a
 space vehicle Patent
 [NASA-CASE-XLE-00820] c14 N71-16014

FORD, A. G.
 Rock drill for recovering samples
 [NASA-CASE-XNF-07478] c14 N69-21923
 Electrically-operated rotary shutter Patent
 [NASA-CASE-XNF-00637] c14 N70-40273
 Motion restraining device
 [NASA-CASE-NFO-13619-1] c37 N78-16369
 Speed control device for a heavy duty shaft
 [NASA-CASE-NFO-14170-1] c37 N81-15364

FORD, P. C.
 Hypervelocity gun
 [NASA-CASE-XLE-03186-1] c09 N79-21084

FORD, P. E.
 Coulometer and third electrode battery charging
 circuit Patent
 [NASA-CASE-GSC-10487-1] c03 N71-24719

FORD, R. E.
 Antenna system using parasitic elements and two
 driven elements at 90 deg angle fed 180 deg
 out of phase Patent
 [NASA-CASE-XLA-00414] c07 N70-38200

FOREHAND, L.
 Solar cell mounting Patent
 [NASA-CASE-XNF-00826] c03 N71-2C895

FORESTIERI, A. P.
 Method of making silicon solar cell array
 [NASA-CASE-LEW-11069-1] c44 N74-14784
 Solar cell shingle
 [NASA-CASE-LEW-12587-1] c44 N77-31601
 Method of making encapsulated solar cell modules
 [NASA-CASE-LEW-12185-1] c44 N78-25528

FORLIFER, W. E.
 Landing gear Patent
 [NASA-CASE-XMF-01174] c02 N70-41589

FORHAN, R.
 Ion sputter textured graphite
 [NASA-CASE-LEW-12919-1] c24 N81-27198

FORSYTHE, A. E.
 Umbilical separator for rockets Patent
 [NASA-CASE-XNF-00425] c11 N70-38202

FORTIN, A.
 Method of electroforming a rocket chamber
 [NASA-CASE-LEW-11118-1] c20 N74-32919
 Rocket chamber and method of making
 [NASA-CASE-LEW-11118-2] c20 N76-14191
 Heat exchanger and method of making
 [NASA-CASE-LEW-12441-1] c34 N79-13289
 Heat exchanger and method of making
 [NASA-CASE-LEW-12441-2] c34 N80-24573
 Heat exchanger and method of making
 [NASA-CASE-LEW-12441-3] c44 N81-24519

POSTER, J. V.
 Mechanically limited, electrically operated
 hydraulic valve system for aircraft controls
 Patent
 [NASA-CASE-XAC-00048] c02 N71-29128
 Magnetic position detection method and apparatus
 [NASA-CASE-ARC-10179-1] c21 N72-22619

POSTER, L. E.
 Magnetomotive metal working device Patent
 [NASA-CASE-XMF-03793] c15 N71-24833

FOSTER, T.
Variable cycle gas turbine engines
[NASA-CASE-LEW-12916-1] c37 N78-17384
Variable mixer propulsion cycle
[NASA-CASE-LEW-12917-1] c07 N78-18067

FOWLER, J.
Bit error rate measurement above and below bit
rate tracking threshold
[NASA-CASE-MSC-12743-1] c32 N79-16263

FOWLER, J. T.
Parasitic suppressing circuit
[NASA-CASE-ERC-10403-1] c10 N73-26228

FOX, E. L.
Induction heating gun
[NASA-CASE-LAR-12540-1] c37 N80-11468
One step dual purpose joining technique
[NASA-CASE-LAR-12595-1] c37 N80-11469

FOX, W. E.
Event recorder Patent
[NASA-CASE-XLE-01832] c14 N71-21006

FRALEY, T. O.
Method and apparatus for rapid thrust increases
in a turbofan engine
[NASA-CASE-LEW-12971-1] c07 N80-16039

FRANCISCO, A. C.
Process for applying a protective coating for
salt bath brazing Patent
[NASA-CASE-XLE-00046] c15 N70-33311

FRANCISCUS, L. C.
Supersonic-combustion rocket
[NASA-CASE-LEW-11058-1] c20 N74-13502

FRANK, H. A.
Electrolytically regenerative hydrogen-oxygen
fuel cell Patent
[NASA-CASE-XLE-04526] c03 N71-11052

FRANKS, J. M.
Laser Doppler velocity simulator
[NASA-CASE-LAR-12176-1] c36 N80-16321
Direction sensitive laser velocimeter
[NASA-CASE-LAR-12177-1] c36 N81-24422

FRANKLIN, W. J.
Segmented back-up bar Patent
[NASA-CASE-XMF-00640] c15 N70-39924
Portable alignment tool Patent
[NASA-CASE-XMF-01452] c15 N70-41371

FRASER, A. S.
Water system virus detection
[NASA-CASE-MSC-16098-1] c51 N79-16693

FRAZE, R. E.
Cryogenic cooling system Patent
[NASA-CASE-NPO-10467] c23 N71-26654

FRAZER, R. E.
Vacuum evaporator with electromagnetic ion
steering Patent
[NASA-CASE-NPO-10331] c09 N71-26701
Coupling apparatus for ultrasonic medical
diagnostic system
[NASA-CASE-NPO-13935-1] c52 N79-14751
Strong thin membrane structure
[NASA-CASE-NPO-14021-2] c27 N80-16163
Apparatus for endoscopic examination
[NASA-CASE-NPO-14092-1] c52 N80-16725
Constant magnification optical tracking system
[NASA-CASE-NPO-14813-1] c74 N80-24152

FRAZIER, M. J.
Junction range finder
[NASA-CASE-KSC-10108] c14 N73-25461

FRECHER, J. C.
High temperature nickel-base alloy Patent
[NASA-CASE-XLE-00151] c17 N70-33283
External liquid-spray cooling of turbine blades
Patent
[NASA-CASE-XLE-00037] c28 N70-33372
Nickel-base alloy Patent
[NASA-CASE-XLE-00283] c17 N70-36616
High temperature cobalt-base alloy Patent
[NASA-CASE-XLE-00726] c17 N71-15644
High temperature cobalt-base alloy Patent
[NASA-CASE-XLE-02991] c17 N71-16025
Nickel-base alloy containing Mo-W-Al-Cr-
Ta-Zr-C-Nb-B Patent
[NASA-CASE-XLE-02082] c17 N71-16026
High temperature ferromagnetic cobalt-base alloy
Patent
[NASA-CASE-XLE-03629] c17 N71-23248
Liquid spray cooling method Patent
[NASA-CASE-XLE-00027] c33 N71-29152
Method of forming superalloys
[NASA-CASE-LEW-10805-1] c15 N73-13465

Cobalt-base alloy
[NASA-CASE-LEW-10436-1] c17 N73-32415
Method of heat treating a formed powder product
material
[NASA-CASE-LEW-10805-3] c26 N74-10521
Method of forming articles of manufacture from
superalloy powders
[NASA-CASE-LEW-10805-2] c37 N74-13179
Nickel base alloy
[NASA-CASE-LEW-12270-1] c26 N77-32280

FREDRICKSON, C. A.
Energy absorption device Patent
[NASA-CASE-XNP-01848] c15 N71-28959

FREEMAN, E. T.
Film advance indicator
[NASA-CASE-LAR-12474-1] c35 N80-31774

FREEMAN, E. S.
Air frame drag balance Patent
[NASA-CASE-XLA-00113] c14 N70-33386

FREGGINS, R. A.
Thermal flux transfer system
[NASA-CASE-NPO-12070-1] c28 N73-32606

FRENCH, E. E.
Ozonation of cooling tower waters
[NASA-CASE-NPO-14340-1] c45 N80-14579

FRENCH, J. C.
Nickel base alloy
[NASA-CASE-LEW-10874-1] c17 N72-22535

FRIEDRICH, C. W.
Apparatus for welding sheet material
[NASA-CASE-XMS-01330] c37 N75-27376

FRIEDMAN, H. J.
Automated clinical system for chromosome analysis
[NASA-CASE-NPO-13913-1] c52 N79-12694

FRIEDEL, M. V.
Positive isolation disconnect
[NASA-CASE-MSC-16043-1] c37 N79-11402

FRIEDERICH, J. E.
Biomedical radiation detecting probe Patent
[NASA-CASE-XMS-01177] c05 N71-19440

FRIEDRICH, E. W.
Reentry vehicle leading edge Patent
[NASA-CASE-XLA-00165] c31 N70-33242

FRIICHTENICHT, J. F.
Apparatus for handling micron size range
particulate material
[NASA-CASE-NPO-10151] c37 N78-17386

FRIPP, A. L.
Pyroelectric detector arrays
[NASA-CASE-LAR-12363-1] c35 N81-12389

FRIISBIE, H. F.
Device for determining relative angular position
between a spacecraft and a radiation emitting
celestial body
[NASA-CASE-GSC-11444-1] c14 N73-28490

FRIEZE, W. M.
Method of fabricating a photovoltaic module of a
substantially transparent construction
[NASA-CASE-NPO-14303-1] c44 N80-18550

FRIETZEN, M., JR.
Noncontaminating swabs
[NASA-CASE-MFS-18100] c15 N72-11390

FROENHLING, S. C.
Casting propellant in rocket engine
[NASA-CASE-LAR-11995-1] c28 N77-10213

FROST, J. D., JR.
EEG sleep analyzer and method of operation Patent
[NASA-CASE-MSC-13282-1] c05 N71-24729
Compressible biomedical electrode
[NASA-CASE-MSC-13648] c05 N72-27103
Snap-in compressible biomedical electrode
[NASA-CASE-MSC-14623-1] c52 N77-28717

FRYER, T. B.
Telemeter adaptable for implanting in an animal
Patent
[NASA-CASE-XAC-05706] c05 N71-12342
RF controlled solid state switch
[NASA-CASE-ARC-10136-1] c09 N72-22202
Low power electromagnetic flowmeter providing
accurate zero set
[NASA-CASE-ARC-10362-1] c14 N73-32326
Miniature ingestible telemeter devices to
measure deep-body temperature
[NASA-CASE-ARC-10583-1] c52 N76-29894
Induction powered biological radiosonde
[NASA-CASE-ARC-11120-1] c52 N80-18691

FUCHS, J. C.
Lightning current waveform measuring system
[NASA-CASE-KSC-11018-1] c33 N79-10337

FOHR, W.
 Method for applying photographic resists to otherwise incompatible substrates
 [NASA-CASE-MSC-18107-1] c27 N81-25209

FOHRMISTER, P. F.
 Random function tracer Patent
 [NASA-CASE-XLA-01401] c15 N71-21179

FUJIOKA, B. S.
 Folding structure fabricated of rigid panels
 [NASA-CASE-XHQ-02146] c18 N75-27040

FULCHER, C. W. G.
 Automatic control of liquid cooling garment by cutaneous and external auditory meatus temperatures
 [NASA-CASE-MSC-13917-1] c05 N72-15098

FULCHER, B. W.
 Low speed phaselock speed control system
 [NASA-CASE-GSC-11127-1] c09 N75-24758

FULLER, H. V.
 Cable restraint
 [NASA-CASE-LAR-10129-1] c15 N73-25512
 Reefing system
 [NASA-CASE-LAR-10129-2] c37 N74-20063
 Binocular device for displaying numerical information in field of view
 [NASA-CASE-LAR-11782-1] c74 N77-20882

FUNG, L. W.
 Massively parallel processor computer
 [NASA-CASE-GSC-12223-1] c60 N79-27864

FUNK, B. H., JR.
 Optical probing of supersonic flows with statistical correlation
 [NASA-CASE-MFS-20642] c14 N72-21407

FURCINI, C. A.
 Pulse-width modulation multiplier Patent
 [NASA-CASE-XER-09213] c07 N71-12390

FURMAN, B. E.
 Closed loop spray cooling apparatus
 [NASA-CASE-LEW-11981-1] c31 N78-17237
 Closed loop spray cooling apparatus
 [NASA-CASE-LEW-11981-2] c34 N79-20336

FURBER, B. L.
 Automated analysis of oxidative metabolites
 [NASA-CASE-ARC-10469-1] c25 N75-12086

FURTSCH, T. A.
 Electrically conductive palladium containing polyimide films
 [NASA-CASE-LAR-12705-1] c33 N80-24549

FURUKOTO, H. W.
 Optical pump and driver system for lasers
 [NASA-CASE-ERC-10283] c16 N72-25485

FYLER, H. P.
 Very high intensity light source using a cathode ray tube
 [NASA-CASE-XNP-01296] c33 N75-27250

FYNAT, A. L.
 Interferometer-polarimeter
 [NASA-CASE-NPO-11239] c14 N73-12446
 Forward-scatter polarimeter for determining the gaseous depolarization factor in the presence of polluting polydispersed particles
 [NASA-CASE-NPO-13756-1] c35 N76-14434
 High resolution Fourier interferometer-spectrophotopolarimeter
 [NASA-CASE-NPO-13604-1] c35 N76-31490
 Frequency-scanning particle size spectrometer
 [NASA-CASE-NPO-13606-2] c35 N80-18364

G

GAALEMA, S. D.
 CCD correlated quadruple sampling processor
 [NASA-CASE-NPO-14426-1] c33 N79-17134
 CCD correlated quadruple sampling processor
 [NASA-CASE-NPO-14426-1] c33 N81-27396

GABROVIC, L. J.
 Bismuth-lead coatings for gas bearings used in atmospheric environments and vacuum chambers
 Patent
 [NASA-CASE-XGS-02011] c15 N71-20739

GADDIS, D. B.
 Inorganic solid film lubricants Patent
 [NASA-CASE-XMF-03988] c15 N71-21403

GADDIS, J. L.
 Method of forming dynamic membrane on stainless steel support
 [NASA-CASE-MSC-18172-1] c26 N80-19237

GADDY, B. H.
 Optimum performance spacecraft solar cell system
 [NASA-CASE-GSC-10669-1] c03 N72-20031

GADE, D. W.
 Temperature regulation circuit Patent
 [NASA-CASE-XNP-02792] c14 N71-28958

GAETANO, G.
 Fast scan control for deflection type mass spectrometers
 [NASA-CASE-LAR-11428-1] c35 N74-34857

GARR, R. P.
 Analytical test apparatus and method for determining oxide content of alkali metal Patent
 [NASA-CASE-XLE-01997] c06 N71-23527
 Gels as battery separators for soluble electrode cells
 [NASA-CASE-LEW-12364-1] c44 N77-22606
 Zirconium carbide as an electrocatalyst for the chromous/chromic redox couple
 [NASA-CASE-LEW-13246-1] c25 N81-26203

GAISER, E. E.
 Color television systems using a single gun color cathode ray tube Patent
 [NASA-CASE-ERC-10098] c09 N71-28618

GALE, G. P.
 Flow rate switch
 [NASA-CASE-NPO-10722] c09 N72-20199

GALLAGHER, H. E.
 Construction and method of arranging a plurality of ion engines to form a cluster Patent
 [NASA-CASE-XNP-02923] c28 N71-23081
 High efficiency ionizer assembly Patent
 [NASA-CASE-XNP-01954] c28 N71-28850

GALLO, A. J.
 Rapid sync acquisition system Patent
 [NASA-CASE-NPO-10214] c10 N71-26577

GALLOWAY, C. W.
 A gas-to-hydraulic power converter
 [NASA-CASE-MSC-18794-1] c37 N81-24445

GANGULI, P. S.
 Coal desulfurization process
 [NASA-CASE-NPO-13937-1] c44 N78-31527

GARAVAGLIA, A. P.
 Shoulder harness and lap belt restraint system
 [NASA-CASE-ARC-10519-2] c05 N75-25915

GARBA, J. A.
 Pressure seal Patent
 [NASA-CASE-NPO-10796] c15 N71-27068

GARD, L. H.
 Computerized system for translating a torch head
 [NASA-CASE-MFS-23620-1] c37 N79-10421

GARDNER, D. E.
 Wire grid forming apparatus Patent
 [NASA-CASE-XLE-00023] c15 N70-33330

GARDNER, J. N.
 Technique of elbow bending small jacketed transfer lines Patent
 [NASA-CASE-XNP-10475] c15 N71-24679

GARDNER, H. R.
 Heating and cooling system
 [NASA-CASE-LAR-12393-1] c39 N80-25693

GARDNER, H. S.
 Differential pressure cell Patent
 [NASA-CASE-XAC-00042] c14 N70-34816

GARDOS, M. H.
 Refractory porcelain enamel passive control coating for high temperature alloys
 [NASA-CASE-MFS-22324-1] c27 N75-27160

GARFEIN, A.
 Pressure sensitive transducers Patent
 [NASA-CASE-ERC-10087] c14 N71-27334
 Electricity measurement devices employing liquid crystalline materials
 [NASA-CASE-ERC-10275] c26 N72-25680
 Semiconductor transducer device
 [NASA-CASE-ERC-10087-2] c14 N72-31446

GARRIRE, E. M.
 Optical frequency waveguide Patent
 [NASA-CASE-HQN-10541-1] c07 N71-26291
 Laser machining apparatus Patent
 [NASA-CASE-HQN-10541-2] c15 N71-27135
 Optical frequency waveguide and transmission system Patent
 [NASA-CASE-HQN-10541-4] c16 N71-27183
 Optical frequency waveguide and transmission system
 [NASA-CASE-HQN-10541-3] c23 N72-23695

GARRIRE, G.
 X-ray position detector
 [NASA-CASE-NPO-12087-1] c74 N81-19898

GARNER, H. D.
 Jet shoes
 [NASA-CASE-XLA-08491] c05 N69-21380
 Dynamic precession damper for spin stabilized vehicles Patent
 [NASA-CASE-XLA-01989] c21 N70-34295
 Attitude orientation of spin-stabilized space vehicles Patent
 [NASA-CASE-XLA-00281] c21 N70-36943
 Fluid pressure amplifier and system
 [NASA-CASE-LAR-10868-1] c33 N74-11050
 Magnetic heading reference
 [NASA-CASE-LAR-11387-1] c04 N76-20114
 Magnetic heading reference
 [NASA-CASE-LAR-11387-2] c04 N77-19056

GARRAHAN, H. H.
 Solid state pulse generator with constant output width, for variable input width, in nanosecond range Patent
 [NASA-CASE-XGS-03427] c10 N71-23029
 Resettable monostable pulse generator Patent
 [NASA-CASE-GSC-11139] c09 N71-27016

GARREN, J. F., JR.
 Mechanical stability augmentation system Patent
 [NASA-CASE-XLA-06339] c02 N71-13422
 Filtering technique based on high-frequency plant modeling for high-gain control
 [NASA-CASE-LAR-12215-1] c08 N79-23097

GARWOOD, D. C.
 Ionization vacuum gauge Patent
 [NASA-CASE-XNP-00646] c14 N70-35666

GARY, B. L.
 CAT altitude avoidance system
 [NASA-CASE-NPO-15351-1] c47 N81-16677

GASTON, D. H.
 Masking device Patent
 [NASA-CASE-XNP-02092] c15 N70-42033

GASTON, R. P., JR.
 Landing gear Patent
 [NASA-CASE-XMF-01174] c02 N70-41589

GATES, D. W.
 Stabilized zinc oxide coating compositions Patent
 [NASA-CASE-XMF-07770-2] c18 N71-26772
 Synthesis of zinc titanate pigment and coatings containing the same
 [NASA-CASE-MFS-13532] c18 N72-17532
 Method of preparing zinc orthotitanate pigment
 [NASA-CASE-MFS-23345-1] c27 N77-30237

GATES, J. D.
 Self-erecting reflector Patent
 [NASA-CASE-XGS-09190] c31 N71-16102

GATES, L. E., JR.
 Method for fiberizing ceramic materials Patent
 [NASA-CASE-XNP-00597] c18 N71-23088

GATEWOOD, J. R.
 Thin film temperature sensor and method of making same
 [NASA-CASE-NPO-11775] c26 N72-28761

GATLIN, J. A.
 Cartwheel satellite synchronization system Patent
 [NASA-CASE-XGS-05579] c31 N71-15676
 Gravity gradient attitude control system Patent
 [NASA-CASE-GSC-10555-1] c21 N71-27324
 Sampled data controller Patent
 [NASA-CASE-GSC-10554-1] c08 N71-29033

GATTI, A.
 Catalyst for growth of boron carbide single crystal whiskers
 [NASA-CASE-XHQ-03903] c15 N69-21922

GAUSE, R. L.
 Restraint system for ergometer
 [NASA-CASE-MFS-21046-1] c14 N73-27377
 Ergometer
 [NASA-CASE-MFS-21109-1] c05 N73-27941
 Tilting table for ergometer and for other biomedical devices
 [NASA-CASE-MFS-21010-1] c05 N73-30078
 Manual actuator
 [NASA-CASE-MFS-21481-1] c37 N74-18127
 Conductive elastomeric extensometer
 [NASA-CASE-MFS-21049-1] c52 N74-27864
 Ergometer calibrator
 [NASA-CASE-MFS-21045-1] c35 N75-15932

GAUTHIER, H. R.
 Method for analyzing radiation sensitivity of integrated circuits
 [NASA-CASE-NPO-14350-1] c33 N80-14332

GAVALAS, G. R.
 Coal desulfurization process
 [NASA-CASE-NFO-13937-1] c44 N78-31527

GAVERA, H. E.
 Failsafe multiple transformer circuit configuration
 [NASA-CASE-NFO-11078] c09 N72-25262

GAVERILLIS, T. G.
 Turnstile and flared cone UHF antenna
 [NASA-CASE-LAR-10970-1] c33 N76-14372

GDULA, W. G.
 Recovery of radiation damaged solar cells through thermal annealing
 [NASA-CASE-XGS-04047-2] c03 N72-11062

GEDBEN, V. D.
 Circuit for detecting initial systole and diastolic notch
 [NASA-CASE-LEW-11581-1] c54 N75-13531

GEDRILL, H. A.
 Method of protecting the surface of a substrate
 [NASA-CASE-LEW-11696-1] c37 N75-13261
 Duplex aluminized coatings
 [NASA-CASE-LEW-11696-2] c26 N75-19408

GEE, S. W.
 Terminal guidance system
 [NASA-CASE-PRC-10049-1] c04 N74-13420

GEHRING, W. E.
 Apparatus for purging systems handling toxic, corrosive, noxious and other fluids Patent
 [NASA-CASE-XMS-01905] c12 N71-21089

GEIDEMAN, W. A., JR.
 Electric arc light source having undercut recessed anode
 [NASA-CASE-ARC-10266-1] c33 N75-29318

GEIER, D. J.
 Shock absorbing support and restraint means Patent
 [NASA-CASE-XMS-01240] c05 N70-35152

GEIPEL, D. H.
 Omnidirectional acceleration device Patent
 [NASA-CASE-HQN-10780] c14 N71-30265

GEISE, P. E., JR.
 FM/CW radar system
 [NASA-CASE-MFS-22234-1] c32 N79-10264

GELB, L. L.
 Method of repairing discontinuity in fiberglass structures
 [NASA-CASE-LAR-10416-1] c24 N74-30001

GELDERLOOS, H. C.
 Reconfiguring redundancy management
 [NASA-CASE-MSC-18498-1] c60 N80-30050

GELLES, R.
 Wide angle long eye relief eyepiece Patent
 [NASA-CASE-XMS-06056-1] c23 N71-24857

GENTER, R. E.
 Electronically resettable fuse Patent
 [NASA-CASE-XGS-11177] c09 N71-27001

GEORGE, T. E., JR.
 Device for installing rocket engines
 [NASA-CASE-MFS-19220-1] c20 N76-22296

GERDTS, J. C.
 Concentric differential gearing arrangement
 [NASA-CASE-ARC-10462-1] c37 N74-27901

GERINGER, H. J.
 Induction furnace with perforated tungsten foil shielding Patent
 [NASA-CASE-XLE-04026] c14 N71-23267

GERMANN, E. P., JR.
 Radiation direction detector including means for compensating for photocell aging Patent
 [NASA-CASE-XLA-00183] c14 N70-40239

GERTSHA, L. W.
 Foldable conduit Patent
 [NASA-CASE-XLE-00620] c32 N70-41579

GETCHELL, D. E.
 Pressure garment joint Patent
 [NASA-CASE-XMS-09636] c05 N71-12344

GETTELMAN, C. C.
 High powered arc electrodes
 [NASA-CASE-LEW-11162-1] c33 N74-12913

GIACCONI, R.
 X-ray reflection collimator adapted to focus X-radiation directly on a detector Patent
 [NASA-CASE-XHQ-04106] c14 N70-40240

GIANATASIO, A.
 Adaptive polarization separation
 [NASA-CASE-LAR-12196-1] c33 N81-26358

GIANDONENICO, A.
 Millimeter wave radiometer for radio astronomy Patent
 [NASA-CASE-XNP-09832] c30 N71-23723

High-torque open-end wrench
[NASA-CASE-NPO-13541-1] c37 N79-14383

GIANNINI, G. E.
Combination automatic-starting electrical plasma
torch and gas shutoff valve
[NASA-CASE-XLE-10717] c37 N75-25426

GIBSON, P. W.
Contour surveying system Patent
[NASA-CASE-XLA-08646] c14 N71-17586
Pressure operated electrical switch responsive
to a pressure decrease after a pressure increase
[NASA-CASE-LAR-10137-1] c09 N72-22204

GIFFIN, C. E.
Mass spectrometer with magnetic pole pieces
providing the magnetic fields for both the
magnetic sector and an ion-type vacuum pump
[NASA-CASE-NPO-13663-1] c35 N77-14406

GILBERT, G. J.
Apparatus for ballasting high frequency
transistors
[NASA-CASE-IGS-05003] c09 N69-24318

GILBREATH, W. P.
Electrical conductivity cell and method for
fabricating the same
[NASA-CASE-ARC-16810-1] c33 N76-15339

GILCHRIST, C. E.
Signal-to-noise ratio estimating by taking ratio
of mean and standard deviation of integrated
signal samples Patent
[NASA-CASE-XNP-05254] c07 N71-2C791

GILES, R. M. F.
Dye penetrant for surfaces subsequently
contacted by liquid oxygen Patent
[NASA-CASE-XMP-02221] c18 N71-27170

GILKISON, C. A.
Linear accelerator frequency control system Patent
[NASA-CASE-XGS-05441] c10 N71-22962

GILL, W. L.
Burn rate testing apparatus
[NASA-CASE-XMS-09690] c33 N72-25913

GILLERMAN, J. B.
Water management system and an electrolytic cell
therefor Patent
[NASA-CASE-MSC-10960-1] c03 N71-24718

GILLESPIE, W., JR.
Infrared scanner Patent
[NASA-CASE-XLA-00120] c21 N70-33181
Passive communication satellite Patent
[NASA-CASE-XLA-00210] c30 N70-40309
Alleviation of divergence during rocket launch
Patent
[NASA-CASE-XLA-00256] c31 N71-15663
Method of making an inflatable panel Patent
[NASA-CASE-XLA-03497] c15 N71-23052

GILLETTE, R. B.
Plasma cleaning device
[NASA-CASE-MFS-22906-1] c75 N78-27913

GILLEY, G. C.
Shared memory for a fault-tolerant computer
[NASA-CASE-NPO-13139-1] c60 N76-21914

GILLEY, P. J.
Material fatigue testing system
[NASA-CASE-MFS-20673] c14 N73-20476

GILLIGAN, J. E.
Method of preparing zinc orthotitanate pigment
[NASA-CASE-MFS-23345-1] c27 N77-30237

GILLMORE, W. F.
Method and apparatus for high resolution
spectral analysis
[NASA-CASE-NPO-10748] c08 N72-20177

GILMAN, M. M.
Flanged major modular assembly jig
[NASA-CASE-MSC-19372-1] c39 N76-31562

GILBREATH, M. C.
Omnidirectional microwave spacecraft antenna
Patent
[NASA-CASE-XLA-03114] c09 N71-22888

GILWEE, H. J., JR.
Honeycomb-laminate composite structure
[NASA-CASE-ARC-10913-1] c24 N78-15180

GIB, B.
High acceleration cable deployment system
[NASA-CASE-ARC-11256-1] c37 N79-23432

GIB, W.
Apparatus and method for control of a solid
fueled rocket vehicle Patent
[NASA-CASE-XNP-00217] c28 N70-38181

GIBER, J. D.
Catalyst surfaces for the chromous/chromic redox
couple
[NASA-CASE-LEW-13148-1] c33 N80-20487
Catalyst surfaces for the chromous/chromic redox
couple
[NASA-CASE-LEW-13148-2] c44 N81-29524

GINSBURG, A.
Supercharged topping rocket propellant feed system
[NASA-CASE-XLE-02062-1] c20 N80-14188

GIORGINI, E. A.
Self-contained breathing apparatus
[NASA-CASE-MSC-14733-1] c54 N76-24900

GIOVANNETTI, A., JR.
High-temperature, high-pressure spherical
segment valve Patent
[NASA-CASE-XAC-00074] c15 N70-34817

GIBALA, A. S.
Open type urine receptacle
[NASA-CASE-MSC-12324-1] c05 N72-22093
Open ended ratchet type tubing cutter
[NASA-CASE-MSC-18538-1] c37 N80-22703

GLASER, P. E.
Apparatus for measuring thermal conductivity
Patent
[NASA-CASE-XGS-01052] c14 N71-15992

GLASSEY, E. A.
Line following servosystem Patent
[NASA-CASE-XAC-00001] c15 N71-28952

GLAWE, G. E.
Enthalpy and stagnation temperature
determination of a high temperature laminar
flow gas stream Patent
[NASA-CASE-XLE-00266] c14 N70-34156
Sensing probe
[NASA-CASE-LEW-10281-1] c14 N72-17327

GLEKAS, L. P.
Compact solar still Patent
[NASA-CASE-XMS-04533] c15 N71-23086

GLENN, C. G.
Manual actuator
[NASA-CASE-MFS-21481-1] c37 N74-18127
Conductive elastomeric extensometer
[NASA-CASE-MFS-21049-1] c52 N74-27864

GLENN, D. C.
Method of lubricating rolling element bearings
Patent
[NASA-CASE-XLE-09527] c15 N71-17688
Rolling element bearings Patent
[NASA-CASE-XLE-09527-2] c15 N71-26189

GLOBUS, R. H.
Process of forming particles in a cryogenic path
Patent
[NASA-CASE-NPO-10250] c23 N71-16212

GLOMB, W. L.
Time division radio relay synchronizing system
using different sync code words for in sync
and out of sync conditions Patent
[NASA-CASE-GSC-10373-1] c07 N71-19773
Tracking receiver Patent
[NASA-CASE-XGS-08679] c10 N71-21473

GLORIA, H. E.
Ultraviolet and thermally stable polymer
compositions
[NASA-CASE-ARC-10592-1] c27 N74-21156
Ultraviolet and thermally stable polymer
compositions
[NASA-CASE-ARC-10592-2] c27 N76-32315

GOERING, B. S.
Open tube guideway for high speed air cushioned
vehicles
[NASA-CASE-LAR-10256-1] c85 N74-34672

GOETZ, A. F. E.
Multispectral imaging and analysis system
[NASA-CASE-NPO-13691-1] c43 N79-17288

GOETZ, C.
Quartz ball valve
[NASA-CASE-NPO-14473-1] c37 N80-23654

GOLD, H.
Autonotive gas turbine fuel control
[NASA-CASE-LEW-12785-1] c37 N78-24545

GOLD, H. S.
Gas turbine engine fuel control
[NASA-CASE-LEW-11187-1] c28 N73-19793

GOLDBERG, G. I.
Reaction wheel scanner Patent
[NASA-CASE-XGS-02629] c14 N71-21082

GOLDBERG, J.
Automatic fault correction system for parallel
signal channels Patent
[NASA-CASE-XNP-03263] c09 N71-18843

GOLDEN, D. P., JR.
 Contourograph system for monitoring electrocardiograms
 [NASA-CASE-MSC-13407-1] c10 N72-20225
 Apparatus and method for processing Korotkov sounds
 [NASA-CASE-MSC-13999-1] c52 N74-26626

GOLDMAN, G. C.
 High powered arc electrodes
 [NASA-CASE-LEW-11162-1] c33 N74-12913

GOLDOWSKI, M. P.
 Linear magnetic bearings
 [NASA-CASE-GSC-12582-1] c37 N81-16469

GOLDSBERG, R. E.
 Ultraviolet and thermally stable polymer compositions
 [NASA-CASE-ARC-10592-1] c27 N74-21156
 Ultraviolet and thermally stable polymer compositions
 [NASA-CASE-ARC-10592-2] c27 N76-32315

GOLDSCHMIED, F. E.
 Shear modulated fluid amplifier Patent
 [NASA-CASE-MFS-10412] c12 N71-17578

GOLDSTEIN, J. V.
 Solar battery with interconnecting means for plural cells Patent
 [NASA-CASE-XNP-06506] c03 N71-11050
 Solid state matrices
 [NASA-CASE-NPO-10591] c03 N72-22041
 Solar cell panels with light transmitting plate
 [NASA-CASE-NPO-10747] c03 N72-22042

GOLDSTEIN, A. W.
 Supersonic fan blading
 [NASA-CASE-LEW-11402-1] c07 N74-28226

GOLDSTEIN, C. S.
 Dynamic capacitor having a peripherally driven element and system incorporating the same
 [NASA-CASE-XNP-02899-1] c33 N79-21265

GOLDSTEIN, H. E.
 Silica reusable surface insulation
 [NASA-CASE-ARC-10721-1] c27 N76-22376
 Reaction cured glass and glass coatings
 [NASA-CASE-ARC-11051-1] c27 N78-32260
 Fibrous refractory composite insulation
 [NASA-CASE-ARC-11169-1] c24 N79-24062
 Adjustable high emittance gap filler
 [NASA-CASE-ARC-11310-1] c27 N80-23454

GOLDSTEIN, I.
 Clear air turbulence detector
 [NASA-CASE-MFS-21244-1] c36 N75-15028

GOLDSTEIN, R.
 Optical gyroscope system
 [NASA-CASE-NPO-14258-1] c35 N81-33448

GOLDSTEIN, R. H.
 Correlation function apparatus Patent
 [NASA-CASE-XNP-00746] c07 N71-21476
 Method and apparatus for mapping planets
 [NASA-CASE-NPO-11001] c07 N72-21118
 Binary coded sequential acquisition ranging system
 [NASA-CASE-NPO-11194] c08 N72-25209
 Apparatus for deriving synchronizing pulses from pulses in a single channel PCM communications system
 [NASA-CASE-NPO-11302-1] c07 N73-13149
 Method and apparatus for a single channel digital communications system
 [NASA-CASE-NPO-11302-2] c32 N74-10132
 Digital demodulator-correlator
 [NASA-CASE-NPO-13982-1] c32 N79-14267

GONZALEZ-SANABRIA, O. D.
 Alkaline battery containing a separator of a cross-linked copolymer of vinyl alcohol and unsaturated carboxylic acid
 [NASA-CASE-LEW-13102-1] c44 N81-29531

GOODLOE, R. E.
 Telephone multiline signaling using common signal pair
 [NASA-CASE-KSC-11023-1] c32 N79-23310

GOODRICH, J. A.
 Locking device for turbine rotor blades Patent
 [NASA-CASE-XNP-00816] c28 N71-28928

GOODWIN, F. E.
 Opto-mechanical subsystem with temperature compensation through isothermal design
 [NASA-CASE-GSC-12059-1] c35 N77-27366

GOODWIN, R. A.
 Spectroscope equipment using a slender cylindrical reflector as a substitute for a slit Patent

[NASA-CASE-XGS-08269] c23 N71-26206

GOODYER, H. J.
 Stagnation pressure probe
 [NASA-CASE-LAR-11139-1] c35 N74-32878

GOOKIN, R. E.
 System for synchronizing synthesizers of communication systems
 [NASA-CASE-GSC-12148-1] c32 N79-20296

GORADIA, C. P.
 High voltage planar multijunction
 [NASA-CASE-LEW-13400-1] c44 N81-16528
 High voltage V-groove solar cell
 [NASA-CASE-LEW-13401-1] c44 N81-16529

GORDON, B. L.
 Television noise reduction device
 [NASA-CASE-MSC-12607-1] c32 N75-21485

GORDON, W. A.
 Arc electrode of graphite with ball tip Patent
 [NASA-CASE-XLE-04788] c09 N71-22987

GORELICK, D.
 Arterial pulse wave pressure transducer
 [NASA-CASE-GSC-11531-1] c52 N74-27566

GORSTEIN, M.
 Two color horizon sensor
 [NASA-CASE-ERC-10174] c14 N72-25409

GOSS, W. C.
 High pulse rate high resolution optical radar system
 [NASA-CASE-NPO-11426] c07 N73-26119
 Optical gyroscope system
 [NASA-CASE-NPO-14258-1] c35 N81-33448

GOULD, C. W.
 Printed circuit board with bellows rivet connection Patent
 [NASA-CASE-XNP-05082] c15 N70-41960

GOULD, J. M.
 Static inverters which sum a plurality of waves Patent
 [NASA-CASE-XMF-00663] c08 N71-18752
 Acquisition and tracking system for optical radar
 [NASA-CASE-MFS-20125] c16 N72-13437

GOULD, W. I., JR.
 Millimeter wave antenna system Patent Application
 [NASA-CASE-GSC-10949-1] c07 N71-28965

GRAAB, J. W.
 Analytical test apparatus and method for determining oxide content of alkali metal Patent
 [NASA-CASE-XLE-01997] c06 N71-23527

GRABOWSKI, J. P.
 Target acquisition antenna
 [NASA-CASE-GSC-10064-1] c10 N72-22235

GRAFF, J.
 Amino acid analysis
 [NASA-CASE-NPO-12130-1] c25 N75-14844

GRAFSTEIN, D.
 Fluidic-thermochromic display device Patent
 [NASA-CASE-ERC-10031] c12 N71-18603

GRAHAM, A. B.
 Propulsive lateral control nozzle
 [NASA-CASE-LAR-12136-1] c08 N81-33210

GRAHAM, O. L.
 Color television system
 [NASA-CASE-MSC-12146-1] c07 N72-17109

GRAHAM, R. W.
 Liquid storage tank venting device for zero gravity environment Patent
 [NASA-CASE-XLE-01449] c15 N70-41646
 Curved film cooling admission tube
 [NASA-CASE-LEW-13174-1] c34 N81-12363

GRAN, A. A.
 Venting device for pressurized space suit helmet Patent
 [NASA-CASE-XMS-09652-1] c05 N71-26333

GRANA, D. C.
 Remote water monitoring system
 [NASA-CASE-LAR-11973-1] c35 N78-27384
 Natural turbulence electrical power generator
 [NASA-CASE-LAR-11551-1] c44 N80-29834
 Apparatus and process for microbial detection and enumeration
 [NASA-CASE-LAR-12709-1] c51 N81-29727

GRANATA, R. L.
 Sidereal frequency generator Patent
 [NASA-CASE-XGS-02610] c14 N71-23174

GRANT, D. J.
 Passively regulated water electrolysis rocket engine Patent
 [NASA-CASE-XGS-08729] c28 N71-14044

Precision thrust gage Patent
[NASA-CASE-XGS-02319] c14 N71-22965

Fluid flow meter with comparator reference means
Patent
[NASA-CASE-XGS-01331] c14 N71-22996

GRANT, G. R.
Dual wavelength scanning Doppler velocimeter
[NASA-CASE-ARC-10637-1] c35 N75-16783

GRANT, R. H.
Spacecraft attitude sensor
[NASA-CASE-GSC-10890-1] c21 N73-30640

GRANTHAM, W. L.
Means for measuring the electron density
gradients of the plasma sheath formed around a
space vehicle Patent
[NASA-CASE-XLA-06232] c25 N71-20563

Antenna design for surface wave suppression Patent
[NASA-CASE-XLA-10772] c07 N71-28980

GRAY, C. E.
Optical characteristics measuring apparatus Patent
[NASA-CASE-XNP-08840] c23 N71-16365

GRAY, D. L.
Solar cell angular position transducer
[NASA-CASE-LAR-11999-1] c44 N80-16552

GRAY, D. T.
Three-axis adjustable loading structure
[NASA-CASE-FRC-10051-1] c35 N74-13129

GRAY, J. L.
Automatic lightning detection and photographic
system
[NASA-CASE-KSC-10728-1] c14 N73-32319

GRAY, N. C.
Fire extinguishing apparatus having a slidable
mass for a penetrator nozzle
[NASA-CASE-KSC-11064-1] c31 N81-14137

GRAY, V. H.
Boiler for generating high quality vapor Patent
[NASA-CASE-XLE-00785] c33 N71-16104

Ablative system
[NASA-CASE-LEW-10359] c33 N72-25911

Ablative system
[NASA-CASE-LEW-10359-2] c33 N73-25952

Space vehicle with artificial gravity and
earth-like environment
[NASA-CASE-LEW-11101-1] c31 N73-32750

GRAYSON, J. H.
Voltage-current characteristic simulator Patent
[NASA-CASE-XMS-01554] c10 N71-16578

GREEN, V. J.
Inductive liquid level detection system Patent
[NASA-CASE-XLE-01609] c14 N71-16500

GREEN, F. J.
Variable ratio mixed-mode bilateral master-slave
control system for shuttle remote manipulator
system
[NASA-CASE-MSC-14245-1] c18 N75-27041

GREEN, A. T.
Method and apparatus for nondestructive testing
of pressure vessels
[NASA-CASE-NPO-12142-1] c38 N76-28563

GREEN, C. W., JR.
Rocket injector head
[NASA-CASE-XHP-04592-1] c20 N79-21125

GREEN, R. D.
Linear sawtooth voltage-wave generator employing
transistor timing circuit having
capacitor-Zener diode combination feedback
Patent
[NASA-CASE-XMS-01315] c09 N70-41675

GREEN, K. A.
Highly efficient antenna system using a
corrugated horn and scanning hyperbolic
reflector
[NASA-CASE-NPO-13568-1] c32 N76-21365

Multifrequency broadband polarized horn antenna
[NASA-CASE-NPO-14588-1] c32 N81-25278

GREEN, R. G.
Traversing probe Patent
[NASA-CASE-XPR-02007] c12 N71-24692

Layout tool Patent
[NASA-CASE-FRC-10005] c15 N71-26145

Method and apparatus for attaching physiological
monitoring electrodes Patent
[NASA-CASE-XPR-07658-1] c05 N71-26293

GREEN, R. R.
Serial digital decoder Patent
[NASA-CASE-NPO-10150] c08 N71-24650

Apparatus for deriving synchronizing pulses from
pulses in a single channel PCM communications
system
[NASA-CASE-NPO-11302-1] c07 N73-13149

Method and apparatus for a single channel
digital communications system
[NASA-CASE-NPO-11302-2] c32 N74-10132

GREEN, W. L.
Mass measuring system Patent
[NASA-CASE-XMS-03371] c05 N70-42000

GREENBERG, J.
Combined electrolysis device and fuel cell and
method of operation Patent
[NASA-CASE-XLE-01645] c03 N71-20904

Heat activated cell with alkali anode and alkali
salt electrolyte Patent
[NASA-CASE-LEW-11358] c03 N71-26084

Heat activated cell Patent
[NASA-CASE-LEW-11359] c03 N71-28579

Method of making emf cell
[NASA-CASE-LEW-11359-2] c03 N72-20034

GREENLEAF, J. E.
Thermistor holder for skin temperature
measurements
[NASA-CASE-ARC-10855-1] c52 N77-10780

Sweat collection capsule
[NASA-CASE-ARC-11031-1] c52 N81-29763

GREENWOOD, T. D.
Thermoset-thermoplastic aromatic polyamides
[NASA-CASE-LAR-12723-1] c27 N81-15107

GREENWOOD, T. L.
Seismic displacement transducer Patent
[NASA-CASE-XMF-00479] c14 N70-34794

Condition and condition duration indicator Patent
[NASA-CASE-XMF-01097] c10 N71-16058

GREGORY, J. W.
Rocket motor system Patent
[NASA-CASE-XLE-00323] c28 N70-38505

Combustion chamber Patent
[NASA-CASE-XLE-04857] c28 N71-23968

Rocket thrust throttling system
[NASA-CASE-LEW-10374-1] c28 N73-13773

GREGORY, T. J.
Rotating launch device for a remotely piloted
aircraft
[NASA-CASE-ARC-10979-1] c09 N77-19076

GRIEVE, S. H.
Apparatus for testing wiring harness by
vibration generating means
[NASA-CASE-MSC-15158-1] c14 N72-17325

GRIFFIN, C. R.
Antenna deployment mechanism for use with a
spacecraft
[NASA-CASE-GSC-12331-1] c18 N80-14183

GRIFFIN, F. D.
Device for determining the accuracy of the flare
on a flared tube
[NASA-CASE-XKS-03495] c14 N69-39785

Optical monitor panel Patent
[NASA-CASE-XKS-03509] c14 N71-23175

GRIFFIN, R. H.
Apparatus for conducting flow electrophoresis in
the substantial absence of gravity
[NASA-CASE-MFS-21394-1] c34 N74-27744

GRIFFIN, W. S.
Fluid jet amplifier
[NASA-CASE-XLE-03512] c12 N69-21466

Fluid jet amplifier Patent
[NASA-CASE-XLE-09341] c12 N71-28741

GRIFFITH, G. E.
High intensity heat and light unit Patent
[NASA-CASE-XLA-00141] c09 N70-33312

GRINER, D. B.
System for the measurement of ultra-low stray
light levels
[NASA-CASE-MFS-23513-1] c74 N79-11865

GRISAFPE, S. J.
Method of making a diffusion bonded refractory
coating Patent
[NASA-CASE-XLE-01604-2] c15 N71-15610

Nickel aluminide coated low alloy stainless steel
[NASA-CASE-LEW-11267-1] c17 N73-32414

Method of protecting the surface of a substrate
[NASA-CASE-LEW-11696-1] c37 N75-13261

Duplex aluminized coatings
[NASA-CASE-LEW-11696-2] c26 N75-19408

Fused silicide coatings containing discrete
particles for protecting niobium alloys
[NASA-CASE-LEW-11179-1] c27 N76-16229

GRISWOLD, R. H., JR.
Dual output variable pitch turbofan actuation

system
[NASA-CASE-LEW-12419-1] c07 N77-14025

GROBMAN, J.
Electric propulsion engine test chamber Patent
[NASA-CASE-XLE-00252] c11 N70-34844

GROOH, N. J.
Electromagnetic mirror drive system
[NASA-CASE-XLA-03724] c14 N69-27461
Variable pulse width multiplier Patent
[NASA-CASE-XLA-02850] c09 N71-20447
Annular momentum control device used for
stabilization of space vehicles and the like
[NASA-CASE-LAR-11051-1] c15 N76-14158
Magnetic suspension and pointing system
[NASA-CASE-LAR-11889-2] c37 N78-27424
Magnetic suspension and pointing system
[NASA-CASE-LAR-11889-1] c35 N79-26372
Bim inertial measuring system
[NASA-CASE-LAR-12052-1] c18 N81-29152

GROSE, W. L.
Combustion detector
[NASA-CASE-LAR-10739-1] c14 N73-16484

GROSS, C.
Method of temperature compensating semiconductor
strain gages Patent
[NASA-CASE-XLA-04555-1] c14 N71-25892
Infrared detectors
[NASA-CASE-LAR-10728-1] c14 N73-12445
Electronically scanned pressure sensor module
with in SITU calibration capability
[NASA-CASE-LAR-12230-1] c35 N79-14347
A self-correcting electronically scanned
pressure sensor
[NASA-CASE-LAR-12686-1] c09 N81-27121

GROSS, W. J.
Method of fabricating an object with a thin wall
having a precisely shaped slit
[NASA-CASE-LAR-10409-1] c31 N74-21059

GROTH, W. G.
Optical inspection apparatus Patent
[NASA-CASE-XMF-00462] c14 N70-34298

GROVE, C. R.
Lightning current waveform measuring system
[NASA-CASE-KSC-11018-1] c33 N79-10337

GROVES, W. O.
Method for the preparation of inorganic single
crystal and polycrystalline electronic materials
[NASA-CASE-XLE-02545-1] c76 N79-21910

GRUBBS, T. M.
Discrete local altitude sensing device Patent
[NASA-CASE-XMS-03792] c14 N70-41812
Line cutter Patent
[NASA-CASE-XMS-04072] c15 N70-42017
Tension measurement device Patent
[NASA-CASE-XMS-04545] c15 N71-22878
Winch having cable position and load indicators
Patent
[NASA-CASE-MSC-12052-1] c15 N71-24599

GRUBER, C. L.
Method and apparatus for optical modulating a
light signal Patent
[NASA-CASE-GSC-10216-1] c23 N71-26722

GRUBER, R. P.
Closed Loop solar array-ion thruster system with
power control circuitry
[NASA-CASE-LEW-12780-1] c20 N79-20179
Self-reconfiguring solar cell system
[NASA-CASE-LEW-12586-1] c44 N80-14472

GRUNBAUM, B. W.
Automatic multiple-sample applicator and
electrophoresis apparatus
[NASA-CASE-ARC-10991-1] c25 N78-14104
Microelectrophoretic apparatus and process
[NASA-CASE-ARC-11121-1] c25 N79-14169

GRUNBERGER, P. J.
High speed, glitch-free digital to analog
converter
[NASA-CASE-GSC-12319-1] c60 N79-32852

GRUNTHAMER, P. J.
Photoelectron spectrometer with means for
stabilizing sample surface potential
[NASA-CASE-NPO-13772-1] c35 N78-10429

GUILLOTTE, R. J.
Infrared scanner Patent
[NASA-CASE-XLA-00120] c21 N70-33181

GUISINGER, J. E.
Starting circuit for vapor lamps and the like
Patent
[NASA-CASE-XNP-01058] c09 N71-12540

Variable frequency nuclear magnetic resonance
spectrometer Patent
[NASA-CASE-XNP-09830] c14 N71-26266

High voltage transistor amplifier with constant
current load
[NASA-CASE-NPO-11023] c09 N72-17155
Thermomagnetic recording and magneto-optic
playback system having constant intensity
laser beam control
[NASA-CASE-NPO-11317-2] c36 N74-13205
Magneto-optic detection system with noise
cancellation
[NASA-CASE-NPO-11954-1] c35 N78-29421
Thermomagnetic recording and magnetic-optic
playback system
[NASA-CASE-NPO-10872-1] c35 N79-16246
Manganese bismuth films with narrow transfer
characteristics for Curie-point switching
[NASA-CASE-NPO-11336-1] c76 N79-16678

GUIST, L. R.
Solid medium thermal engine
[NASA-CASE-ARC-10461-1] c44 N74-33379

GUNGLE, R. L.
Self-sealing, unbonded, rocket motor nozzle
closure Patent
[NASA-CASE-XLA-02651] c28 N70-41967

GUNTER, W. D., JR.
Multiple pass reimaging optical system
[NASA-CASE-ARC-10194-1] c23 N73-20741
Dual wavelength scanning Doppler velocimeter
[NASA-CASE-ARC-10637-1] c35 N75-16783
Pseudo-backscatter laser Doppler velocimeter
employing antiparallel-reflector in the
forward direction
[NASA-CASE-ARC-10970-1] c36 N77-25501

GUPTA, A.
Double-beam optical method and apparatus for
measuring thermal diffusivity and other
molecular dynamic processes in utilizing the
transient thermal lens effect
[NASA-CASE-NPO-14657-1] c74 N81-17887

GUTLER, C. A.
Ablation sensor
[NASA-CASE-XLA-01781] c14 N69-39975
Pressurized cell micrometeoroid detector Patent
[NASA-CASE-XLA-00936] c14 N71-14996
Dual measurement ablation sensor
[NASA-CASE-LAR-10105-1] c34 N74-15652

GUSSOW, S. S.
Pseudo-noise test set for communication system
evaluation
[NASA-CASE-MFS-22671-1] c35 N75-21582
Method of and means for testing a tape
record/playback system
[NASA-CASE-MFS-22671-2] c35 N77-17426

GUSTAFSON, G. L.
Apparatus for measuring thermal conductivity
Patent
[NASA-CASE-XGS-01052] c14 N71-15992

GUSTINCIC, J. J.
Microwave limb sounder
[NASA-CASE-NPO-14544-1] c74 N79-34014

GUTSHALL, R. L.
Star scanner
[NASA-CASE-GSC-11569-1] c89 N74-30886

GUY, J. T., SR.
Disk pack cleaning table Patent Application
[NASA-CASE-LAR-10590-1] c15 N70-26819

GYORGAK, C. A.
Process for applying a protective coating for
salt bath brazing Patent
[NASA-CASE-XLE-00046] c15 N70-33311
Protective device for machine and metalworking
tools Patent
[NASA-CASE-XLE-01092] c15 N71-22797
Extrusion die for refractory metals Patent
[NASA-CASE-XLE-06773] c15 N71-23817

H

HABBAL, M. A.
Analog signal integration and reconstruction
system Patent
[NASA-CASE-NFO-10344] c10 N71-26544
System for quantizing graphic displays
[NASA-CASE-NFO-10745] c08 N72-22164

HABRA, J. H.
Multiple varactor frequency doubler Patent
[NASA-CASE-XMF-04958-1] c10 N71-26414

HADEK, V.
Apparatus and method for measuring the Seebeck coefficient and resistivity of materials
[NASA-CASE-NPO-11749] c14 N73-28486

Durable antistatic coating for polymethylmethacrylate
[NASA-CASE-NPO-13867-1] c27 N78-14164

HADLAND, W. O.
Control device Patent
[NASA-CASE-XAC-10019] c15 N71-23809

Two degree inverted flexure
[NASA-CASE-ARC-10345-1] c15 N73-12488

HADLEY, B. C., JR.
High field Cds detector for infrared radiation
[NASA-CASE-LAR-11027-1] c35 N74-18088

HADT, W. P.
Shaft seal assembly for high speed and high pressure applications
[NASA-CASE-LEW-11873-1] c37 N79-22475

HADY, W. P.
High speed, self-acting shaft seal
[NASA-CASE-LEW-11274-1] c37 N75-21631

HAEHNER, C. L.
Peen plating
[NASA-CASE-GSC-11163-1] c15 N73-32360

Static coefficient test method and apparatus
[NASA-CASE-GSC-11893-1] c35 N76-31489

HAERTHER, L. W.
Chassis unit insert tightening-extract device
[NASA-CASE-XMS-01077-1] c37 N79-33467

HAEUSSERMAN, W.
Velocity measurement system
[NASA-CASE-MFS-23363-1] c35 N78-32396

Magnetic field control
[NASA-CASE-MFS-23828-1] c33 N80-17359

HAFLE, R. S.
Digital plus analog output encoder
[NASA-CASE-GSC-12115-1] c62 N76-31946

HAGIHARA, P. S.
Frequency to analog converter Patent
[NASA-CASE-XNP-07040] c08 N71-12500

HAGOOD, G. J., JR.
Function generator for synthesizing complex vibration mode patterns
[NASA-CASE-LAR-10310-1] c10 N73-20253

HAINES, B. P.
Visual examination apparatus
[NASA-CASE-ARC-10329-1] c05 N73-26072

Visual examination apparatus
[US-PATENT-BE-28,921] c52 N76-30793

Optical instrument employing reticle having preselected visual response pattern formed thereon
[NASA-CASE-ARC-10576-1] c74 N77-22950

HALEY, C. T.
Clock setter
[NASA-CASE-LAR-11458-1] c35 N76-16392

HALEY, P. C.
Cavity radiometer Patent
[NASA-CASE-XNP-08961] c14 N71-24809

Plural output optometric sample cell and analysis system
[NASA-CASE-NPO-10233-1] c74 N78-33913

HALL, A. C.
Helmet weight simulator
[NASA-CASE-LAR-12320-1] c54 N81-27806

HALL, D. P.
Apparatus for measuring electric field strength on the surface of a model vehicle Patent
[NASA-CASE-XLE-02038] c09 N71-16086

HALL, E. D.
Spectroscope equipment using a slender cylindrical reflector as a substitute for a slit Patent
[NASA-CASE-XGS-08269] c23 N71-26206

HALL, E. H.
Method for determining presence of O₂ in magnesium oxide
[NASA-CASE-NPO-10774] c06 N72-17095

HALL, J. B., JR.
Surface roughness detector Patent
[NASA-CASE-XLA-00203] c14 N70-34161

Liquid waste feed system
[NASA-CASE-LAR-10365-1] c05 N72-27102

Automatic liquid inventory collecting and dispensing unit
[NASA-CASE-LAR-11071-1] c35 N75-19611

HALL, J. F., JR.
Illumination system including a virtual light source Patent
[NASA-CASE-HQN-10781] c23 N71-30292

HALL, J. H.
High powered arc electrodes
[NASA-CASE-LEW-11162-1] c33 N74-12913

HALLAM, K. L.
Image tube
[NASA-CASE-GSC-11602-1] c33 N74-21850

HALLBERG, P. C.
Turn on transient limiter Patent
[NASA-CASE-GSC-10413] c10 N71-26531

Method and apparatus for slicing crystals
[NASA-CASE-GSC-12291-1] c76 N80-18951

Crystal cleaving machine
[NASA-CASE-GSC-12584-1] c76 N80-32246

HALLOCK, J. H.
Multiple hologram recording and readout system Patent
[NASA-CASE-ERC-10151] c16 N71-29131

HALPERT, G.
Frangible electrochemical cell
[NASA-CASE-XGS-10010] c03 N72-15986

HAMMERHES, C. L.
Ambient cure polyimide foams
[NASA-CASE-ARC-11170-1] c27 N79-11215

HAMLET, J. F.
Automatic quadrature control and measuring system
[NASA-CASE-MFS-21660-1] c35 N74-21017

LC-oscillator with automatic stabilized amplitude via bias current control
[NASA-CASE-MFS-21698-1] c33 N74-26732

HAMMACK, J. B.
Space capsule Patent
[NASA-CASE-XLA-00149] c31 N70-37938

Space capsule Patent
[NASA-CASE-XLA-01332] c31 N71-15664

HAMMOND, A. D.
Variable sweep aircraft Patent
[NASA-CASE-XLA-03659] c02 N71-11041

HANCHEY, K. K.
Device for preventing high voltage arcing in electron beam welding Patent
[NASA-CASE-XMF-08522] c15 N71-19486

HAND, P. J.
Temperature compensated digital inertial sensor
[NASA-CASE-NPO-13044-1] c35 N74-15094

HANGER, R. T.
Method and apparatus for fabricating improved solar cell modules
[NASA-CASE-NPO-14416-1] c44 N81-14389

HANKINSON, T. W. H.
Fatigue-resistant shear pin
[NASA-CASE-XLA-09122] c15 N69-27505

HANNA, M. P.
Dual polarity full wave dc motor drive Patent
[NASA-CASE-XNP-07477] c09 N71-26092

Event sequence detector
[NASA-CASE-NFO-11703-1] c10 N73-32144

High isolation RF signal selection switches
[NASA-CASE-NPO-13081-1] c33 N74-22814

HANSEN, D. O.
Particle parameter analyzing system
[NASA-CASE-XLE-06094] c33 N78-17293

HANSEN, G. B., JR.
Automatic vehicle location system
[NASA-CASE-NFO-11850-1] c32 N74-12912

Vehicle locating system utilizing AM broadcasting station carriers
[NASA-CASE-NPO-13217-1] c32 N75-26194

HANSEN, I. G.
Flow angle sensor and read out system Patent
[NASA-CASE-XLE-04503] c14 N71-24864

Low level signal limiter
[NASA-CASE-XLE-04791] c32 N74-22096

HANSEN, S.
Thrust dynamometer Patent
[NASA-CASE-XLE-00702] c14 N70-40203

Method of making screen by casting Patent
[NASA-CASE-XLE-00953] c15 N71-15966

Fluid flow control valve Patent
[NASA-CASE-XLE-00703] c15 N71-15967

Thrust dynamometer Patent
[NASA-CASE-XLE-05260] c14 N71-20429

HANSON, M. P.
Turbo-machine blade vibration damper Patent
[NASA-CASE-XLE-00155] c28 N71-29154

HANSON, P. W.
Lift balancing device
[NASA-CASE-LAR-10348-1] c11 N73-12264

HANSON, B. H.
 Tensile strength testing device Patent
 [NASA-CASE-XNP-05634] c15 N71-24834
 Hydroforming techniques using epoxy molds Patent
 [NASA-CASE-XLE-05641-1] c15 N71-26346
HANST, P. L.
 Repetitively pulsed, wavelength selective laser
 Patent
 [NASA-CASE-ERC-10178] c16 N71-24832
HANQ, K. E.
 A method for the deposition of beta-silicon
 carbide by isoeptitaxy
 [NASA-CASE-ERC-10120] c26 N69-33482
HARADA, Y.
 Method of preparing zinc orthotitanate pigment
 [NASA-CASE-MFS-23345-1] c27 N77-30237
HARALSON, H. S.
 Ultrasonic scanning system for in-place
 inspection of brazed tube joints
 [NASA-CASE-MFS-20767-1] c38 N74-15130
HARAWAY, W. M., JR.
 Thermal protection ablation spray system Patent
 [NASA-CASE-XLA-04251] c18 N71-26100
 Bonding method in the manufacture of continuous
 regression rate sensor devices
 [NASA-CASE-LAR-10337-1] c24 N75-3C260
 Vacuum pressure molding technique
 [NASA-CASE-LAR-10073-1] c37 N76-24575
HARD, T. M.
 Optical systems having spatially invariant outputs
 [NASA-CASE-ERC-10248] c14 N72-17323
HARDGROVE, W. P.
 Omni-directional anisotropic molecular trap Patent
 [NASA-CASE-XGS-00783] c30 N71-17788
HARDY, J. C.
 Omnidirectional joint Patent
 [NASA-CASE-XMS-09635] c05 N71-24623
 Restraining mechanism
 [NASA-CASE-MSC-13054] c54 N78-17677
HARMAN, J. H., III
 Pulse activated pclarographic hydrogen detector
 Patent
 [NASA-CASE-IMF-06531] c14 N71-17575
HARMS, V. W.
 Apparatus for automatically stabilizing the
 attitude of a nonguided vehicle
 [NASA-CASE-ARC-10134] c30 N72-17873
HAROULES, G. G.
 Method and means for providing an absolute power
 measurement capability Patent
 [NASA-CASE-ERC-11020] c14 N71-26774
 Clear air turbulence detector
 [NASA-CASE-ERC-10081] c14 N72-28437
 Method and apparatus for measuring solar
 activity and atmospheric radiation effects
 [NASA-CASE-ERC-10276] c14 N73-26432
HARPER, C. A.
 Thermal conductive connection and method of
 making same Patent
 [NASA-CASE-XMS-02087] c09 N70-41717
HARPER, P. M., SR.
 Improved tire/wheel concept
 [NASA-CASE-LAR-11695-2] c37 N80-18402
 Tire/wheel concept
 [NASA-CASE-LAR-11695-2] c37 N81-24443
HARRAP, V.
 Integrated circuit including field effect
 transistor and cermet resistor
 [NASA-CASE-GSC-10835-1] c09 N72-33205
HARRIGILL, H. T., JR.
 Regulated high efficiency, lightweight
 capacitor-diode multiplier dc to dc converter
 [NASA-CASE-LBW-12791-1] c33 N78-32341
HARRIS, D. H.
 Recorder using selective noise filter
 [NASA-CASE-ERC-10112] c07 N72-21119
HARRIS, B. F.
 Method for fabricating a mass spectrometer inlet
 leak
 [NASA-CASE-GSC-12077-1] c35 N77-24455
HARRIS, B. P.
 Holding fixture for a hot stamping press
 [NASA-CASE-GSC-12619-1] c37 N81-16470
HARRIS, B. V., JR.
 Supersonic aircraft Patent
 [NASA-CASE-XLA-04451] c02 N71-12243
HARRISON, D. R.
 Transducer circuit and catheter transducer Patent
 [NASA-CASE-ARC-10132-1] c09 N71-24597
 Diode-quad bridge circuit means
 [NASA-CASE-ARC-10364-3] c33 N75-19520
 Diode-quad bridge circuit means
 [NASA-CASE-ARC-10364-2] c33 N75-25041
HARRISON, B. S.
 Polymeric foams from cross-linkable
 poly-n-arylenebenzimidazoles
 [NASA-CASE-ARC-11008-1] c27 N78-31232
HARRISON, E., JR.
 Universal connectors for joining stringers
 [NASA-CASE-LAR-12744-1] c37 N81-31551
HARRISON, P. L.
 Life raft stabilizer
 [NASA-CASE-HSC-12393-1] c02 N73-26006
HARRISON, B. G., JR.
 Pressure variable capacitor
 [NASA-CASE-IMP-09752] c14 N69-21541
 Temperature telemetric transmitter Patent
 [NASA-CASE-NFO-10649] c07 N71-24840
HARSTAD, K. G.
 Isotope separation using metallic vapor lasers
 [NASA-CASE-NFO-13550-1] c36 N77-26477
HARTENSTEIN, B. G.
 Accelerometer with FM output Patent
 [NASA-CASE-XLA-00492] c14 N70-34799
 Variable time constant smoothing circuit Patent
 [NASA-CASE-XGS-01983] c10 N70-41964
HARTING, D. B.
 Strain gage Patent Application
 [NASA-CASE-FRC-10053] c14 N70-35587
HARTMANN, H. J.
 Supercharged topping rocket propellant feed system
 [NASA-CASE-XLE-02062-1] c20 N80-14188
HARTOP, R.
 Waveguide cooling system
 [NASA-CASE-NFO-15401-1] c33 N81-29344
HARTOP, R. W.
 Reflex feed system for dual frequency antenna
 with frequency cutoff means
 [NASA-CASE-NFO-14022-1] c32 N78-31321
HARVEY, G. A.
 Maksutov spectrograph Patent
 [NASA-CASE-XLA-10402] c14 N71-29041
 Apparatus for photographing meteors
 [NASA-CASE-LAR-10226-1] c14 N73-19419
HARVEY, W. D.
 Heat sensing instrument Patent
 [NASA-CASE-XLA-01551] c14 N71-22989
HARWELL, B. J.
 Nonflammable coating compositions
 [NASA-CASE-MFS-20486-2] c27 N74-17283
HASBACH, W. A.
 Solid state matrices
 [NASA-CASE-NFO-10591] c03 N72-22041
HASKELL, B. E.
 Optical process for producing classification
 maps from multispectral data
 [NASA-CASE-MSC-14472-1] c43 N77-10584
 Interactive color display for multispectral
 imagery using correlation clustering
 [NASA-CASE-MSC-16253-1] c32 N79-20297
HASSON, D. F.
 Space and atmospheric reentry vehicle Patent
 [NASA-CASE-XGS-00260] c31 N70-37924
HATAKEYAMA, L. F.
 Method and system for ejecting fairing sections
 from a rocket vehicle
 [NASA-CASE-GSC-10590-1] c31 N73-14853
HATCH, J. E.
 Energy conversion apparatus Patent
 [NASA-CASE-XLE-00212] c03 N70-34134
HATCHER, H. H.
 Electromagnetic mirror drive system
 [NASA-CASE-XLA-03724] c14 N69-27461
 Infrared scanner Patent
 [NASA-CASE-XLA-00120] c21 N70-33181
 Automatic balancing device Patent
 [NASA-CASE-LAR-10774] c10 N71-13545
 Attitude sensor for space vehicles Patent
 [NASA-CASE-XLA-00793] c21 N71-22880
HATFIELD, J. J.
 Integrated time shared instrumentation display
 Patent
 [NASA-CASE-XLA-01952] c08 N71-12507
HATHAWAY, M. E.
 Frangible tube energy dissipation Patent
 [NASA-CASE-XLA-00754] c15 N70-34850
HAUGE, G.
 Low distortion automatic phase control circuit

[NASA-CASE-MPS-21671-1] c33 N74-22885

HAURY, V. E.
Hydrazinium nitroformate propellant stabilized with nitroguanidine
[NASA-CASE-MPO-12000] c27 N72-25699

Hydrazinium nitroformate propellant with saturated polymeric hydrocarbon binder
[NASA-CASE-MPO-12015] c27 N73-16764

HAUSER, J. A.
High pressure gas filter system Patent
[NASA-CASE-MFS-12806] c14 N71-17588

High pressure helium purifier Patent
[NASA-CASE-MNP-06888] c15 N71-24044

HAVENS, D. E.
Meter for use in detecting tension in straps having predetermined elastic characteristics
[NASA-CASE-MFS-22189-1] c35 N75-19615

HAWKINS, C. A.
System for the measurement of ultra-low stray light levels
[NASA-CASE-MFS-23513-1] c74 N79-11865

HAWLEY, J. J.
Method of erasing target material of a vidicon tube or the like Patent
[NASA-CASE-MNP-06028] c09 N71-23189

HAWLEY, W. W.
Omnidirectional acceleration device Patent
[NASA-CASE-MQN-10780] c14 N71-30265

HAYDEN, R. E.
Magnetic counter Patent
[NASA-CASE-MNP-08836] c09 N71-12515

HAYNES, D. P.
Remote water monitoring system
[NASA-CASE-LAR-11973-1] c35 N78-27384

HAYNES, J. L.
Ultrasonic scanning system for in-place inspection of brazed tube joints
[NASA-CASE-MFS-20767-1] c38 N74-15130

HAYNIE, C. C.
Variable contour securing system
[NASA-CASE-MSC-16270-1] c37 N78-27423

Heat treat fixture and method of heat treating
[NASA-CASE-LAR-11821-1] c26 N80-28492

HAYNIG, C. C.
Apparatus for positioning modular components on a vertical or overhead surface
[NASA-CASE-LAR-11465-1] c37 N76-21554

HAYNOS, J. G.
Interconnection of solar cells Patent
[NASA-CASE-XGS-01475] c03 N71-11058

Frangible electrochemical cell
[NASA-CASE-XGS-10010] c03 N72-15986

HAYS, L. G.
Fluid phase analyzer Patent
[NASA-CASE-MPO-10691] c14 N71-26199

Two phase flow system with discrete impinging two-phase jets
[NASA-CASE-MPO-11556] c12 N72-25292

Observation window for a gas confining chamber
[NASA-CASE-MPO-10890] c11 N73-12265

Flow control valve
[NASA-CASE-MPO-11951-1] c37 N74-21065

HEARN, C. P.
Wideband VCO with high phase stability Patent
[NASA-CASE-XLA-03893] c10 N71-27271

Multichannel logarithmic RF level detector
[NASA-CASE-LAR-11021-1] c32 N76-14321

Phase modulating with odd and even finite power series of a modulating signal
[NASA-CASE-LAR-11607-1] c32 N77-14292

HEBERLIG, J. C.
Survival couch Patent
[NASA-CASE-XLA-00118] c05 N70-33285

HECHT, R.
Apparatus for absolute pressure measurement
[NASA-CASE-LAR-10000] c14 N73-30394

HECKELMAN, J. D.
Multialarm summary alarm Patent
[NASA-CASE-XLE-03061-1] c10 N71-24798

HECKLER, C. B.
Mercury capillary interrupter Patent
[NASA-CASE-MNP-02251] c12 N71-20896

Method for making conductors for ferrite memory arrays
[NASA-CASE-LAR-10994-1] c24 N75-13032

HEDGEPEATH, J. M.
Foldable beam
[NASA-CASE-LAR-12077-1] c31 N81-25259

HEDLUND, R. C.
Precision rectifier with PET switching means Patent
[NASA-CASE-ARC-10101-1] c09 N71-33109

Self-tuning bandpass filter
[NASA-CASE-ARC-10264-1] c09 N73-20231

HEER, E.
Pressure seal Patent
[NASA-CASE-MFO-10796] c15 N71-27068

HEFFERMAN, J. T.
Surface finishing
[NASA-CASE-MSC-12631-3] c27 N81-14077

HEFFERNAN, J. T.
Surface finishing
[NASA-CASE-MSC-12631-1] c24 N77-28225

HEPLINGER, L. O.
Spatial filter for Q-switched lasers
[NASA-CASE-LEW-12164-1] c36 N77-32478

Microbalance
[NASA-CASE-MSC-11242] c35 N78-17358

HEIDMANN, M. F.
Injector for bipropellant rocket engines Patent
[NASA-CASE-MNP-00148] c28 N70-38710

Instrument for the quantitative measurement of radiation at multiple wave lengths Patent
[NASA-CASE-XLE-00211] c14 N70-41946

Control of transverse instability in rocket combustors Patent
[NASA-CASE-XLE-04603] c33 N71-21507

Burning rate control of solid propellants Patent
[NASA-CASE-XLE-03494] c27 N71-21819

HEIDT, M. F.
Ultrastable calibrated light source
[NASA-CASE-MSC-12293-1] c14 N72-27411

HEIER, W. C.
Method for molding compounds Patent
[NASA-CASE-XLA-01091] c15 N71-10672

Evacuated displacement compression molding
[NASA-CASE-LAR-10782-1] c31 N74-14133

Method for compression molding of thermosetting plastics utilizing a temperature gradient across the plastic to cure the article
[NASA-CASE-LAR-10489-1] c31 N74-18124

Method of laminating structural members
[NASA-CASE-XLA-11028-1] c24 N74-27035

Molding apparatus
[NASA-CASE-LAR-10489-2] c31 N74-32920

Evacuated, displacement compression mold
[NASA-CASE-LAR-10782-2] c31 N75-13111

Molded composite pyrogen igniter for rocket motors
[NASA-CASE-LAR-12018-1] c20 N78-24275

HEIMBUCH, A. H.
Chromato-fluorographic drug detector
[NASA-CASE-ARC-10633-1] c25 N74-26947

HEIMERL, G. J.
Extensometer frame
[NASA-CASE-XLA-10322] c15 N72-17452

HEIN, L. A.
Mechanical thermal motor
[NASA-CASE-MFS-23062-1] c37 N77-12402

Spherical bearing
[NASA-CASE-MFS-23447-1] c37 N79-11404

Amplified wind turbine apparatus
[NASA-CASE-MFS-23830-1] c44 N80-21831

HEINDL, J. C.
Fluid lubricant system Patent
[NASA-CASE-MNP-03972] c15 N71-23048

HEINEMANN, K.
Method of forming aperture plate for electron microscope
[NASA-CASE-ARC-10448-2] c74 N75-12732

Electron microscope aperture system
[NASA-CASE-ARC-10448-3] c35 N77-14408

HEINEY, O. K.
Self-obturator, gas operated launcher
[NASA-CASE-MPO-11013] c11 N72-22247

HEISHMAN, R. M.
Tube dimpling tool Patent
[NASA-CASE-XMS-06876] c15 N71-21536

Heat treat fixture and method of heat treating
[NASA-CASE-LAR-11821-1] c26 N80-28492

HELBERT, W. B., JR.
Method of repairing discontinuity in fiberglass structures
[NASA-CASE-LAR-10416-1] c24 N74-30001

HELLBAUM, E. F.
Logic AND gate for fluid circuits Patent
[NASA-CASE-XLA-07391] c12 N71-17579

Technique of duplicating fragile core
[NASA-CASE-XLA-07829] c15 N72-16329

Fluid pressure amplifier and system
[NASA-CASE-LAR-10868-1] c33 N74-11050

HELLER, J. A.
Apparatus and method for reducing thermal stress
in a turbine rotor
[NASA-CASE-LEW-12232-1] c07 N79-10057

HELLMANN, R. F.
Apparatus for purging systems handling toxic,
corrosive, noxious and other fluids Patent
[NASA-CASE-XMS-01905] c12 N71-21089

HELMS, C. R.
Prosthetic urinary sphincter
[NASA-CASE-MFS-23717-1] c52 N81-25660

HENDEL, P. J.
Thermoplastic rubber comprising ethylene-vinyl
acetate copolymer, asphalt and fluxing oil
[NASA-CASE-NFO-08835-1] c27 N78-35228

HENDERSON, M. E.
Gas chromatograph injection system
[NASA-CASE-ARC-10344-2] c35 N75-26334

HENDRICKS, H. D.
Method of detecting oxygen in a gas
[NASA-CASE-LAR-10668-1] c06 N73-16106

HENLEY, W. H.
Method of fabricating an object with a thin wall
having a precisely shaped slit
[NASA-CASE-LAR-10409-1] c31 N74-21059

HENNIGAN, T. J.
Apparatus for measuring swelling characteristics
of membranes
[NASA-CASE-XGS-03865] c14 N69-21363

Prevention of pressure build-up in
electrochemical cells Patent
[NASA-CASE-XGS-01419] c03 N70-41864

Non-magnetic battery case Patent
[NASA-CASE-XGS-00886] c03 N71-11053

Method and apparatus for battery charge control
Patent
[NASA-CASE-XGS-05432] c03 N71-15438

Sealing device for an electrochemical cell Patent
[NASA-CASE-XGS-02630] c03 N71-22974

Sealed electrochemical cell provided with a
flexible casing Patent
[NASA-CASE-XGS-01513] c03 N71-23336

HENRY, A. W.
Dicyanoacetylene polymers Patent
[NASA-CASE-XNP-03250] c06 N71-23500

HENRY, B. Z., JR.
Variable geometry manned orbital vehicle Patent
[NASA-CASE-XLA-03691] c31 N71-15674

HENRY, V. P.
Systems and methods for determining radio
frequency interference
[NASA-CASE-GSC-12150-1] c32 N79-11265

HEPPNER, J. P.
Wide range linear fluxgate magnetometer Patent
[NASA-CASE-XGS-01587] c14 N71-15962

HEBBELL, T. P.
Gas purged dry box glove Patent
[NASA-CASE-XLE-02531] c05 N71-23080

Method of producing refractory composites
containing tantalum carbide, hafnium carbide,
and hafnium boride Patent
[NASA-CASE-XLE-03940] c18 N71-26153

Refractory metal base alloy composites
[NASA-CASE-XLE-03940-2] c17 N72-28536

HERMAN, C. F.
Differential pulse code modulation
[NASA-CASE-MSC-12506-1] c32 N77-12239

HERMANN, A. M.
Method of using photo voltaic cell using
poly-N-vinylcarbazole complex Patent
[NASA-CASE-NFO-10373] c03 N71-18698

HERMESMEYER, C. R.
Method and apparatus for quadriphase-shift-key
and linear phase modulation
[NASA-CASE-NFO-14444-1] c33 N81-15192

HEROLD, C. P.
Quick attach and release fluid coupling assembly
Patent
[NASA-CASE-XKS-01985] c15 N71-10782

HEER, B. W.
A support technique for vertically oriented
launch vehicles
[NASA-CASE-XLA-02704] c11 N69-21540

HERMANN, A. L.
Locking device with rolling detents Patent
[NASA-CASE-XNP-01371] c15 N70-41829

HERROD, B. G.
Power control circuit
[NASA-CASE-XNP-02713] c10 N69-39888

HESLIN, T. H.
Inorganic spark chamber frame and method of
making the same
[NASA-CASE-GSC-12354-1] c35 N80-20565

HESPERHIDE, W. H.
Variable direction force coupler
[NASA-CASE-MFS-20317] c15 N73-13463

HESS, D. A.
Passive propellant system
[NASA-CASE-MFS-23642-2] c20 N78-27176

Passive propellant system
[NASA-CASE-MFS-23642-1] c20 N80-10278

HESS, R. V.
A technique for breaking ice in the path of a ship
[NASA-CASE-LAR-10815-1] c16 N72-22520

HESS, R. W.
Contour surveying system Patent
[NASA-CASE-XLA-08646] c14 N71-17586

HESTER, H. B.
Current regulating voltage divider
[NASA-CASE-MFS-20935] c09 N71-34212

HETTCOAT, J. P.
Thruster maintenance system Patent
[NASA-CASE-MFS-20325] c28 N71-27095

HEWES, D. E.
Rotating space station simulator Patent
[NASA-CASE-XLA-03127] c11 N71-10776

Reduced gravity simulator Patent
[NASA-CASE-XLA-01787] c11 N71-16028

HEYMAN, J. S.
Ultrasonic calibration device
[NASA-CASE-LAR-11435-1] c35 N76-15432

Cv ultrasonic bolt tensioning monitor
[NASA-CASE-LAR-12016-1] c39 N78-15512

Pseudo continuous wave instrument
[NASA-CASE-LAR-12260-1] c35 N79-10390

Liquid-immersible electrostatic ultrasonic
transducer
[NASA-CASE-LAR-12465-1] c35 N80-18363

CDS solid state phase insensitive ultrasonic
transducer
[NASA-CASE-LAR-12304-1] c35 N80-20559

Frequency tracked pulse technique for ultrasonic
analysis
[NASA-CASE-LAR-12697-1] c32 N80-26571

Acoustic tooth cleaner
[NASA-CASE-LAR-12471-1] c52 N81-12724

Pulsed phase locked loop strain monitor
[NASA-CASE-LAR-12772-1] c33 N81-15195

HEYSER, E. C.
Temperature control system with a pulse width
modulated bridge
[NASA-CASE-NFO-11304] c14 N73-26430

Method for shaping and aiming narrow beams
[NASA-CASE-NFO-14632-1] c32 N80-12256

HEYSON, H. H.
Variable geometry wind tunnels
[NASA-CASE-XLA-07430] c11 N72-22246

HIEDA, L. S.
Controller for computer control of brushless dc
motors
[NASA-CASE-NPO-13970-1] c33 N81-20352

HIGA, W. H.
Refrigeration apparatus
[NASA-CASE-NPO-10309] c15 N69-23190

Refrigeration apparatus Patent
[NASA-CASE-XNP-08877] c15 N71-23025

Stirling cycle engine and refrigeration systems
[NASA-CASE-NPO-13613-1] c37 N76-29590

Centrifugal-reciprocating compressor
[NASA-CASE-NPO-14597-1] c37 N79-23431

HIGBY, R. P.
Electronic background suppression method and
apparatus for a field scanning sensor
[NASA-CASE-XGS-05211] c07 N69-39980

HIGH, R. W.
Meteoroid capture cell construction
[NASA-CASE-MSC-12423-1] c91 N76-30131

HILBERT, E. E.
Data multiplexer using tree switching
configuration
[NASA-CASE-NFO-11333] c08 N72-22162

Flexible computer accessed telemetry
[NASA-CASE-NFO-11358] c07 N72-25172

Space communication system for compressed data with a concatenated Reed-Solomon-Viterbi coding channel
[NASA-CASE-NPO-13545-1] c32 N77-12240

HILBORN, E. H.
Method and means for an improved electron beam scanning system Patent
[NASA-CASE-ERC-10552] c09 N71-12539
Fluidic-thermochronic display device Patent
[NASA-CASE-ERC-10031] c12 N71-16603
Plasma fluidic hybrid display Patent
[NASA-CASE-ERC-10100] c09 N71-33519

HILDEBRANDT, A. F.
Helium refining by superfluidity Patent
[NASA-CASE-XNP-00733] c06 N70-34946
Continuous magnetic flux pump
[NASA-CASE-XNP-01187] c15 N73-28516
Superconductive magnetic-field-trapping device
[NASA-CASE-XNP-01185] c26 N73-26710
Magnetic-flux pump
[NASA-CASE-XNP-01188] c15 N73-32361

HILKEB, W. R.
Folding structure fabricated of rigid panels
[NASA-CASE-XHQ-02146] c18 N75-27040

HILL, E. K.
Ultrasonic scanner for radial and flat panels
[NASA-CASE-MFS-20335-1] c35 N74-16415

HILL, O. E.
Burst diaphragm flow initiator Patent
[NASA-CASE-MFS-12915] c11 N71-17600
Wind tunnel test section
[NASA-CASE-MFS-20509] c11 N72-17183

HILL, P. E.
Heat protection apparatus Patent
[NASA-CASE-XLA-00892] c33 N71-17897
Kinesthetic control simulator
[NASA-CASE-LAR-10276-1] c09 N75-15662

HILL, W. E.
Sprayable low density ablator and application process
[NASA-CASE-MFS-23506-1] c24 N78-24290

HILLBERG, E. T.
Load relieving device Patent
[NASA-CASE-XMS-06329-1] c15 N71-20441

HILLBORN, E. H.
Color television systems using a single gun color cathode ray tube Patent
[NASA-CASE-ZRC-10098] c09 N71-28618

HILLIS, D. A.
Drift compensation circuit for analog to digital converter Patent
[NASA-CASE-XNP-04780] c08 N71-15687

HILLMAN, C. E., JR.
Snap-in compressible biomedical electrode
[NASA-CASE-MSC-14623-1] c52 N77-26717

HILLMAN, J. J.
Thermal compensator for closed-cycle helium refrigerator
[NASA-CASE-GSC-12168-1] c31 N79-17029

HILTON, G. E.
Position location and data collection system and method Patent
[NASA-CASE-GSC-10083-1] c30 N71-16090

HIMMELRIGHT, E. H.
High-temperature, high-pressure spherical segment valve Patent
[NASA-CASE-XAC-00074] c15 N70-34817

HIRAYAMA, C.
Glass-to-metal seals comprising relatively high expansion metals
[NASA-CASE-LEW-10698-1] c37 N74-21063

HIRSHFIELD, S. E.
Gas liquefaction and dispensing apparatus Patent
[NASA-CASE-NPO-10070] c15 N71-27372
Novel polymers and method of preparing same
[NASA-CASE-NPO-10998-1] c06 N73-32029

HITCHMAN, M. J.
Automatic real-time pair-feeding system for animals
[NASA-CASE-ARC-10302-1] c51 N74-15778

HOBBART, H. F.
Liquid flow sight assembly Patent
[NASA-CASE-XLE-02958] c14 N70-42074

HOBBES, A. J.
Method and apparatus for determining the contents of contained gas samples
[NASA-CASE-GSC-10903-1] c14 N73-12444

HOBLIN, L. E.
Unfurlable structure including coiled strips thrust launched upon tension release Patent
[NASA-CASE-HQN-00937] c07 N71-28979

HOCHHAIR, E. S.
Gyrator employing field effect transistors
[NASA-CASE-MFS-21433] c09 N73-20232
Integrated P-channel MOS gyrator
[NASA-CASE-MFS-22343-1] c33 N74-34638
Integrable power gyrator
[NASA-CASE-MFS-22342-1] c33 N75-30428

HODDER, D. T.
Apparatus for remote handling of materials
[NASA-CASE-LAR-10634-1] c37 N74-18123

HODGE, P. E.
Corrosion resistant thermal barrier coating
[NASA-CASE-LEW-13088-1] c26 N81-25188

HODGES, D. H.
Hingeless helicopter rotor with improved stability
[NASA-CASE-ARC-10807-1] c05 N77-17029

HOFFLER, G. W.
Apparatus and method for processing Korotkov sounds
[NASA-CASE-MSC-13999-1] c52 N74-26626

HOFFMAN, C. A.
Method for alleviating thermal stress damage in laminates
[NASA-CASE-LEW-12493-1] c24 N81-17170
Method for alleviating thermal stress damage in laminates
[NASA-CASE-LEW-12493-2] c24 N81-26179

HOFFMAN, D. G.
Light detection instrument Patent
[NASA-CASE-XGS-05534] c23 N71-16355

HOFFMAN, E. L.
Flexible foam erectable space structures Patent
[NASA-CASE-XLA-00686] c31 N70-34135

HOFFMAN, H. C.
Gravity gradient attitude control system Patent
[NASA-CASE-GSC-10555-1] c21 N71-27324
Active nutation controller
[NASA-CASE-GSC-12273-1] c35 N80-21719
Method of and apparatus for damping nutation motion with minimum spin axis attitude disturbance
[NASA-CASE-GSC-12551-1] c18 N81-12156

HOFFMAN, I. S.
Impact energy absorber Patent
[NASA-CASE-XLA-01530] c14 N71-23092
Self-supporting strain transducer
[NASA-CASE-LAR-11263-1] c35 N75-33369
Miniature biaxial strain transducer
[NASA-CASE-LAR-11648-1] c35 N77-14407

HOFFMAN, L. A.
Compensating bandwidth switching transients in an amplifier circuit Patent
[NASA-CASE-XNF-01107] c10 N71-28859

HOFFMAN, T. E.
Tunable cavity resonator with ramp shaped supports
[NASA-CASE-HQN-10790-1] c36 N74-11313

HOHL, F.
Volumetric direct nuclear pumped laser
[NASA-CASE-LAR-12183-1] c36 N79-18307
Large volume multiple path nuclear pumped laser
[NASA-CASE-LAR-12592-1] c36 N79-26385
Solar driven liquid metal MHD power generator
[NASA-CASE-LAR-12495-1] c44 N81-32609

HOKLO, E. H.
Welding blades to rotors
[NASA-CASE-LEW-10533-1] c15 N73-28515

HOLDEN, L. E.
Microwave integrated circuit for Josephson voltage standards
[NASA-CASE-MFS-23845-1] c33 N81-17348

HOLDEN, G. E.
Balanced bellows spirometer
[NASA-CASE-IAR-01547] c05 N69-21473

HOLDERER, O. C.
Electric arc driven wind tunnel Patent
[NASA-CASE-XNF-00411] c11 N70-36913

HOLDERMAN, L. E.
Germanium coated microbridge and method
[NASA-CASE-MFS-23274-1] c33 N78-13320

HOLDREN, R. T., III
Radar calibration sphere
[NASA-CASE-XLA-11154] c07 N72-21117

HOLES, J. E.
Digital second-order phase-locked loop
[NASA-CASE-NPO-11905-1] c33 N74-12887

HOLESKI, D. E.
Apparatus for absorbing and measuring power Patent

[NASA-CASE-XLE-00720] c14 N70-40201
HOLKO, K. H.
 Enhanced diffusion welding
 [NASA-CASE-LEW-11388-1] c15 N73-32358
 Apparatus for welding blades to rotors
 [NASA-CASE-LEW-10533-2] c37 N74-11300
 Diffusion welding in air
 [NASA-CASE-LEW-11387-1] c37 N74-16128
 Diffusion welding
 [NASA-CASE-LEW-11388-2] c37 N74-21055
HOLLAHAN, J. H.
 Method of preparing water purification membranes
 [NASA-CASE-ARC-10643-1] c25 N75-12087
 Abrasion resistant coatings for plastic surfaces
 [NASA-CASE-ARC-10915-3] c24 N77-24200
HOLLAND, L. R.
 Apparatus and method for heating a material in a transparent ampoule
 [NASA-CASE-MFS-25436-1] c76 N81-30012
HOLLAND, V. B.
 Signal conditioning circuit apparatus
 [NASA-CASE-ARC-10348-1] c33 N75-19518
HOLLANDER, J.
 Polyurethanes of fluorine containing polycarbonates
 [NASA-CASE-MFS-10512] c06 N73-30099
 Highly fluorinated polymers
 [NASA-CASE-MFS-11492] c06 N73-30102
HOLLANDER, J. B., JR.
 Oxygen post-treatment of plastic surface coated with plasma polymerized silicon-containing monomers
 [NASA-CASE-ARC-10915-2] c27 N79-18052
HOLLEMAN, E. C.
 Three axis controller Patent
 [NASA-CASE-XFB-00181] c21 N70-33279
HOLLENBAUGH, R. C.
 Position location system and method Patent
 [NASA-CASE-GSC-10087-2] c21 N71-13958
 Position location and data collection system and method Patent
 [NASA-CASE-GSC-10083-1] c30 N71-16090
 Traffic control system and method Patent
 [NASA-CASE-GSC-10087-1] c02 N71-19287
 Position location system and method
 [NASA-CASE-GSC-10087-3] c07 N72-12080
 Doppler compensation by shifting transmitted object frequency within limits
 [NASA-CASE-GSC-10087-4] c07 N73-20174
HOLLEY, L. D.
 Automatic lightning detection and photographic system
 [NASA-CASE-KSC-10728-1] c14 N73-32319
 Microcomputerized electric field meter diagnostic and calibration system
 [NASA-CASE-KSC-11035-1] c35 N76-26411
 Digital automatic gain amplifier
 [NASA-CASE-KSC-11008-1] c33 N79-22373
HOLLIDAY, M. L.
 Precision alignment apparatus for cutting a workpiece
 [NASA-CASE-LAR-11658-1] c37 N77-14478
HOLLIS, B. R.
 Liquid immersion apparatus for minute articles
 [NASA-CASE-MFS-25363-1] c31 N80-32585
HOLLIS, B. R., JR.
 Multilevel metallization method for fabricating a metal oxide semiconductor device
 [NASA-CASE-MFS-23541-1] c76 N79-14906
 Method of construction of a multi-cell solar array
 [NASA-CASE-MFS-23540-1] c44 N79-26475
HOLMAN, E. V.
 Latching mechanism Patent
 [NASA-CASE-XMS-03745] c15 N71-21076
HOLMES, B. K.
 Inflatable transpiration cooled nozzle
 [NASA-CASE-MFS-20619] c28 N72-11708
HOLMES, B. K.
 Velocity limiting safety system Patent
 [NASA-CASE-XLA-07473] c15 N71-24895
HOLMES, J. P.
 Oceanic wave measurement system
 [NASA-CASE-MFS-23662-1] c48 N80-16667
HOLMES, L., JR.
 Ruler for making navigational computations
 [NASA-CASE-XNP-01458] c04 N78-17031
HOLMES, B. P.
 Catalyst cartridge for carbon dioxide reduction unit
 [NASA-CASE-LAR-10551-1] c25 N74-12813
 Heat exchanger
 [NASA-CASE-MFS-22991-1] c34 N77-10463
HOLMES, S. J.
 Ultraviolet filter
 [NASA-CASE-XNP-02340] c23 N69-24332
HOLMES, T. H.
 Vibration damping system Patent
 [NASA-CASE-XMS-01620] c23 N71-15673
HOLMES, W. T.
 Lifting body Patent Application
 [NASA-CASE-FRC-10063] c01 N71-12217
HOLMSTROM, P. H.
 Shielded cathode mode bulk effect devices
 [NASA-CASE-ERC-10119] c26 N72-21701
HOLWACH, J.
 Sound-suppressing structure with thermal relief
 [NASA-CASE-LEW-12658-1] c71 N79-14871
HOLT, H. H.
 Transient-compensated SCR inverter
 [NASA-CASE-XLA-08507] c09 N69-39984
 SCR blocking pulse gate amplifier Patent
 [NASA-CASE-XLA-07497] c09 N71-12514
HOLT, J. W.
 Improved attachment system for silica tiles
 [NASA-CASE-MSC-18741-1] c16 N81-16110
HOLT, M. I.
 Scan converting video tape recorder
 [NASA-CASE-NFO-10166-1] c07 N73-22076
 Scan converting video tape recorder
 [NASA-CASE-NFO-10166-2] c35 N76-16391
 Electromagnetic transducer recording head having a laminated core section and tapered gap
 [NASA-CASE-NFO-10711-1] c35 N77-21392
HOLTZ, R. P.
 Coating process
 [NASA-CASE-XNP-06508] c18 N69-39895
HOLWAY, H. P.
 Model launcher for wind tunnels Patent
 [NASA-CASE-XNP-03578] c11 N71-23030
 Mobile sampler for use in acquiring samples of terrestrial atmospheric gasses
 [NASA-CASE-NFO-15220-1] c35 N81-24414
HOMES, R. J.
 Multiparameter vision testing apparatus
 [NASA-CASE-MSC-13601-2] c54 N75-27759
HONEY, R. W.
 Optimum predetection diversity receiving system Patent
 [NASA-CASE-XGS-00740] c07 N71-23098
HONEYCUTT, L., III
 Thermal shock and erosion resistant tantalum carbide ceramic material
 [NASA-CASE-LAR-11902-1] c27 N78-17206
HONG, J. P.
 Real time analysis of voiced sounds
 [NASA-CASE-NFO-13465-1] c32 N76-31372
 System and method for character recognition
 [NASA-CASE-NFO-11337-1] c74 N81-19896
HONG, S. D.
 Double-beam optical method and apparatus for measuring thermal diffusivity and other molecular dynamic processes in utilizing the transient thermal lens effect
 [NASA-CASE-NFO-14657-1] c74 N81-17887
HONNELL, M. A.
 Automatic frequency control for FM transmitter
 [NASA-CASE-MFS-21540-1] c32 N74-19790
 Isolated output system for a class D switching-mode amplifier
 [NASA-CASE-MFS-21616-1] c33 N75-30429
 Frequency modulated oscillator
 [NASA-CASE-MFS-23181-1] c33 N77-17351
HOOD, R. T.
 Hall current measuring apparatus having a series resistor for temperature compensation Patent
 [NASA-CASE-XAC-01662] c14 N71-23037
HOOD, W. R.
 Detection of the transitional layer between laminar and turbulent flow areas on a wing surface
 [NASA-CASE-LAR-12261-1] c02 N80-20224
HOOP, J. H.
 Method and apparatus for nondestructive testing
 [NASA-CASE-MFS-21233-1] c38 N74-15395
 Ultrasonic bone densitometer
 [NASA-CASE-MFS-20994-1] c35 N75-12271
HOOPER, C. D.
 Extensometer Patent

[NASA-CASE-XMF-04680] c15 N71-19489
HOOPER, R. B.
 Collimator of multiple plates with axially aligned identical random arrays of apertures [NASA-CASE-MFS-20546-2] c14 N73-30389
 Automatic lightning detection and photographic system [NASA-CASE-KSC-10728-1] c14 N73-32319
 Three mirror glancing incidence system for X-ray telescope [NASA-CASE-MFS-21372-1] c74 N74-27866
 Multiplate focusing collimator [NASA-CASE-MFS-20932-1] c35 N75-19616
 Extended range X-ray telescope [NASA-CASE-MFS-25282-1] c89 N81-34122
HOOPER, R. J.
 Extrusion die for refractory metals Patent [NASA-CASE-XLE-06773] c15 N71-23817
HOPKINS, P. M.
 Differential phase shift keyed communication system [NASA-CASE-MSC-14065-1] c32 N74-26654
 Differential phase shift keyed signal resolver [NASA-CASE-MSC-14066-1] c33 N74-27705
 Apparatus and method for stabilized phase detection for binary signal tracking loops [NASA-CASE-MSC-16461-1] c33 N79-11313
HOPKINS, V.
 Inorganic solid film lubricants Patent [NASA-CASE-XMF-03988] c15 N71-21403
HOPPING, R. L.
 Landing gear Patent [NASA-CASE-XMF-01174] c02 N70-41589
HORNE, W. B.
 Aircraft wheel spray drag alleviator Patent [NASA-CASE-XLA-01583] c02 N70-36825
HORNER, J. L.
 Optical noise suppression device and method [NASA-CASE-MSC-12640-1] c74 N76-31998
HORTON, D. B.
 Instrument support with precise lateral adjustment Patent [NASA-CASE-XMF-00480] c14 N70-35898
HORTON, J. C.
 Method of making impurity-type semiconductor electrical contacts Patent [NASA-CASE-XMF-01016] c26 N71-17818
HORTON, R. L.
 Method and apparatus for mapping planets [NASA-CASE-NPO-11001] c07 N72-21118
HOSETHIEM, R. B.
 Adaptive tracking notch filter system Patent [NASA-CASE-XMF-01892] c10 N71-22986
HOTZ, G. M.
 Soil penetrometer [NASA-CASE-XNP-05530] c14 N73-32321
 Burrowing apparatus [NASA-CASE-XNP-07169] c15 N73-32362
HOUCK, W. B.
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HSU, Y.-Y.
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HUANG, M. Y.
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HUDSPETH, T.
Phase demodulation system with two phase locked
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HUELSMAN, L. P.
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HUEY, D. C.
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HUFF, R. G.
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HUGGINS, C. T.
Solid state television camera system Patent
[NASA-CASE-XMF-06092] c07 N71-24612

HUGHES, B. C.
Air bearing Patent
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HUGHES, D. B.
Fast scan control for deflection type mass
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HUGHES, F. H.
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HULL, R. A.
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HUMBERT, J. E.
Automatic real-time pair-feeding system for
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HUMENIK, F. H.
Gas turbine combustor Patent
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HUNES, D. H.
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HUMMER, R. F.
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HUNGERFORD, W. J.
Conforming polisher for aspheric surface of
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[NASA-CASE-XGS-02884] c15 N71-22705

HUNKLE, R. B.
Foamed in place ceramic refractory insulating
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HUNT, S. H., JR.
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HUNTER, R. E.
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HUNTRESS, W. T.
Ion and electron detector for use in an ICR

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HUNTRESS, W. F., JR.
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small permanent magnet
[NASA-CASE-NPO-14324-1] c72 N80-27163

HURD, W. A.
System for the measurement of ultra-low stray
light levels
[NASA-CASE-MFS-23513-1] c74 N79-11865

HURD, W. J.
Digital filter for reducing sampling jitter in
digital control systems Patent
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Transition tracking bit synchronization system
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[NASA-CASE-NPO-11130] c08 N72-20176
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[NASA-CASE-NPO-11707] c07 N73-25161

HUSAIN-ABIDI, A. S.
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HUSCHKE, E. G., JR.
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[NASA-CASE-XMP-06053] c26 N75-27126
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HUSHMAN, O. K.
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HUSSEY, M. W.
Filter regeneration systems
[NASA-CASE-MSC-14273-1] c34 N75-33342

HUTCHINSON, W. D.
Manually actuated heat pump
[NASA-CASE-NPO-10677] c05 N72-11084

HUTCHINSON, J. J.
Trifunctional alcohol
[NASA-CASE-NPO-10714] c06 N69-31244
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[NASA-CASE-NPO-10596] c06 N71-25929

HUTTO, R. J.
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I-LECHAO, J.
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IANNINI, A. A.
Pressure sensitive transducers Patent
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IANNONE, E.
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ICELAND, W. P.
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IDEN, R. B.
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IGREBERGS, E. B.
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[NASA-CASE-MFS-22145-2] c75 N76-17951

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Dynamic vibration absorber Patent
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ILLES, P. A.
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Light shield and infrared reflector for fatigue
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[NASA-CASE-XLA-01782] c14 N71-26136

IMBOLDI, E.
Tracking receiver Patent
[NASA-CASE-XGS-08679] c10 N71-21473

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Heating and cooling system
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Anti-buckling fatigue test assembly
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INGHAM, J. D.
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INGHAM, K. T.
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Method of purifying metallurgical grade silicon
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IRWIN, A. S.
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IRWIN, K. S.
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IRWIN, T. P.
Leading edge protection for composite blades
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ISLEY, W. C.
Heated porous plug microthruster
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ITO, T. I.
Preparation of perfluorinated imidoylamidoximes
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Computerized system for translating a torch head
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Multi-channel rotating optical interface for
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[NASA-CASE-NPO-14066-1] c74 N79-34011

IWASAKI, R.
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[NASA-CASE-XAC-10019] c15 N71-23809

IWASAKI, R. S.
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J

- JACK, J. B.**
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[NASA-CASE-XLE-01783] c28 N70-34175
- JACKSON, C. M., JR.**
Wind tunnel model and method
[NASA-CASE-LAR-10812-1] c09 N74-17955
Metric half-span model support system
[NASA-CASE-LAR-12441-1] c09 N80-24334
- JACKSON, K. B.**
Optical alignment system Patent
[NASA-CASE-XNF-02029] c14 N70-41955
- JACKSON, L. B.**
Techniques for insulating cryogenic fuel containers Patent
[NASA-CASE-XLA-01967] c31 N70-42015
Multiwall thermal protection system
[NASA-CASE-LAR-12620-1] c24 N80-12117
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- JACKSON, M. B.**
Directionally solidified eutectic gamma plus beta nickel-base superalloys
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- JACOB, D. S.**
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- JACOBS, I. M.**
Data compression system
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- JACOBS, J. M.**
Biocontamination and particulate detection system
[NASA-CASE-NPO-13953-1] c35 N79-28527
- JACOBS, R. B.**
Densitometer Patent
[NASA-CASE-XLE-00688] c14 N70-41330
- JACOBS, V. L.**
Passive propellant system
[NASA-CASE-MFS-23642-2] c20 N78-27176
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[NASA-CASE-MFS-23642-1] c20 N80-10278
- JACOBSON, D. S.**
Hermetically sealed semiconductor
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- JAGOH, R. B.**
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- JAIN, A.**
Clutter free synthetic aperture radar correlator
[NASA-CASE-NPO-14035-1] c32 N78-18266
Surface roughness measuring system
[NASA-CASE-NPO-13862-1] c35 N79-10391
Multibeam single frequency synthetic aperture radar processor for imaging separate range swaths
[NASA-CASE-NPO-14525-1] c32 N79-19195
Multibeam single frequency synthetic aperture radar processor for imaging separate range swaths
[NASA-CASE-NPO-14525-2] c32 N80-32607
- JAKSTYS, V. J.**
Composite antenna feed
[NASA-CASE-GSC-11046-1] c07 N73-28013
- JALINK, A., JR.**
Method for improving the signal-to-noise ratio of the Wheatstone bridge type bolometer Patent
[NASA-CASE-XLA-02810] c14 N71-25901
Infrared horizon locator
[NASA-CASE-LAR-10726-1] c14 N73-20475
- JALUFKA, B. W.**
Volumetric direct nuclear pumped laser
[NASA-CASE-LAR-12183-1] c36 N79-18307
- JAMES, L. W.**
III-V photocathode with nitrogen doping for increased quantum efficiency
[NASA-CASE-NPO-12134-1] c33 N76-31409
- JAMES, E. J.**
Resilient wheel Patent
[NASA-CASE-MFS-13929] c15 N71-27091
- JAMES, R.**
A system for providing an integrated display of instantaneous information relative to aircraft attitude, heading, altitude, and horizontal situation
[NASA-CASE-FRC-11005-1] c06 N79-24988
- JANISON, R. H.**
Ion-exchange membrane with platinum electrode assembly Patent
[NASA-CASE-XMS-02063] c03 N71-29044
- JANEFF, W.**
Tracking receiver Patent
[NASA-CASE-XGS-08679] c10 N71-21473
- JANKOWSKI, F.**
Quick disconnect filter coupling
[NASA-CASE-MFS-22323-1] c37 N76-14463
- JANNICHE, P. J., JR.**
Passive synchronized spike generator with high input impedance and low output impedance and capacitor power supply Patent
[NASA-CASE-XGS-03632] c09 N71-23311
- JANSEN, H. B.**
Fluid thrust control system
[NASA-CASE-XNF-05964-1] c20 N79-21124
- JAVAN, A.**
Method and apparatus for stabilizing a gaseous optical maser Patent
[NASA-CASE-XGS-03644] c16 N71-18614
- JEANE, H. L.**
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[NASA-CASE-NPO-13067-1] c60 N76-18800
- JECH, R. W.**
Reinforced metallic composites Patent
[NASA-CASE-XLE-02428] c17 N70-33288
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[NASA-CASE-XLE-00231] c17 N70-38198
Reinforced metallic composites Patent
[NASA-CASE-XLE-00228] c17 N70-38490
Method for producing fiber reinforced metallic composites Patent
[NASA-CASE-XLE-03925] c18 N71-22894
- JEDLICHA, J. H.**
Solid medium thermal engine
[NASA-CASE-AEC-10461-1] c44 N74-33379
- JEFFERS, R. L.**
Rapid, quantitative determination of bacteria in water
[NASA-CASE-GSC-12158-1] c51 N78-22585
Method and apparatus for eliminating luminol interference material
[NASA-CASE-MSC-16260-1] c51 N80-16714
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[NASA-CASE-MSC-16777-1] c51 N80-27067
- JEFFERY, P. A. E.**
Compensating linkage for main rotor control
[NASA-CASE-LAR-11797-1] c05 N81-19087
- JEFFREYS, R. B.**
Focused laser Doppler velocimeter
[NASA-CASE-MFS-23178-1] c35 N77-10493
- JELALIAN, A. V.**
Clear air turbulence detector
[NASA-CASE-MFS-21244-1] c36 N73-15028
Focused laser Doppler velocimeter
[NASA-CASE-MFS-23178-1] c35 N77-10493
- JELLISON, J. C.**
Resilience testing device Patent
[NASA-CASE-XLA-08254] c14 N71-26161
- JENKINS, K. H.**
Diode and protection fuse unit Patent
[NASA-CASE-YKS-03381] c09 N71-22796
- JENKINS, L. M.**
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[NASA-CASE-XMS-02532] c15 N70-41808
- JENKINS, R. K.**
Thermally conductive polymers
[NASA-CASE-GSC-11304-1] c06 N72-21105
- JENNINGS, D. E.**
Thermal compensator for closed-cycle helium refrigerator
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Separation nut Patent
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JENSEN, C. A.
Continuous plasma light source
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JENSEN, K. J.
Failure sensing and protection circuit for
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[NASA-CASE-GSC-10114-1] c10 N71-27366

JENSEN, P. A.
Low noise single aperture multimode monopulse
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[NASA-CASE-XNP-01735] c07 N71-22750

JENSEN, R. M.
Solar heating system
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Combined solar collector and energy storage system
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JEPPESEN, G. L.
Deployable flexible tunnel
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JESSUP, A. D.
Variable angle tube holder
[NASA-CASE-LAR-10507-1] c11 N72-25284
Lyophilized spore dispenser
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JETER, J. D.
Flammability test chamber Patent
[NASA-CASE-KSC-10126] c11 N71-24985

JEWELL, P. A.
Data handling system based on source
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[NASA-CASE-XNP-04162-1] c08 N70-34675

JEWELL, R. A.
Production of high purity silicon carbide Patent
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Apparatus for producing high purity silicon
carbide crystals Patent
[NASA-CASE-XLA-02057] c26 N70-40015
Method of coating carbonaceous base to prevent
oxidation destruction and coated base Patent
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Method of coating carbonaceous base to prevent
oxidation destruction and coated base Patent
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JEX, D. W.
Liquid aerosol dispenser
[NASA-CASE-MFS-20829] c12 N72-21310
Two stage light gas-plasma projectile accelerator
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JHABVALA, M. D.
An implantable electrical device
[NASA-CASE-GSC-12560-1] c52 N80-27073
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JHABVALA, M. O.
Complementary DMOS-VMOS integrated circuit
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[NASA-CASE-GSC-12190-1] c33 N79-12321

JOHSON, D. J.
Spectrometer integrated with a facsimile camera
[NASA-CASE-LAR-11207-1] c35 N75-19613

JOHANSEN, K. G.
Systems and methods for determining radio
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JOHANSEN, D. L.
Articulated multiple couch assembly Patent
[NASA-CASE-MSC-11253] c05 N71-12343
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[NASA-CASE-MSC-13140] c05 N72-11085

JOHNS, C. E.
Continuously variable voltage controlled phase
shifter
[NASA-CASE-NPO-11129] c09 N72-33204

JOHNSON, A. L., JR.
Microelectronic module package Patent
[NASA-CASE-XMS-02182] c10 N71-28783

JOHNSON, C. B.
Hypersonic test facility Patent
[NASA-CASE-XLA-00378] c11 N71-15925
Hypersonic test facility Patent
[NASA-CASE-XLA-05378] c11 N71-21475

Image tube
[NASA-CASE-GSC-11602-1] c33 N74-21850

JOHNSON, C. C.
Visual target for retrofire attitude control
[NASA-CASE-XMS-12158-1] c31 N69-27499
Orbital escape device Patent
[NASA-CASE-XMS-06162] c31 N71-28851
Stand-off type ablative heat shield
[NASA-CASE-MSC-12143-1] c33 N72-17947
Amplitude steered array
[NASA-CASE-GSC-11446-1] c33 N74-20860
Reverse osmosis membrane of high urea rejection
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[NASA-CASE-ARC-10980-1] c27 N80-23452

JOHNSON, C. C., JR.
Space capsule Patent
[NASA-CASE-XLA-00149] c31 N70-37938
Space capsule Patent
[NASA-CASE-XLA-01332] c31 N71-15664

JOHNSON, C. E.
Impact testing machine Patent
[NASA-CASE-XNP-04817] c14 N71-23225

JOHNSON, C. L.
Molding process for imidazopyrrolone polymers
[NASA-CASE-LAR-10547-1] c31 N74-13177

JOHNSON, C. W.
Method of resolving clock synchronization error
and means therefor Patent
[NASA-CASE-XNP-08875] c10 N71-23099

JOHNSON, E. G.
System and method for tracking a signal source
[NASA-CASE-HQN-10880-1] c17 N78-17140

JOHNSON, E. T.
Automated clinical system for chromosome analysis
[NASA-CASE-NFO-13913-1] c52 N79-12694

JOHNSON, P. W.
Heat conductive resiliently compressible
structure for space electronics package
modules Patent
[NASA-CASE-MSC-12389] c33 N71-29052

JOHNSON, R. G.
Electronic checkout system for space vehicles
Patent
[NASA-CASE-XKS-08012-2] c31 N71-15566

JOHNSON, R. I.
Training vehicle for controlling attitude Patent
[NASA-CASE-XMS-02977] c11 N71-10746
Gravity stabilized flying vehicle Patent
[NASA-CASE-MSC-12111-1] c02 N71-11039
Hand-held self-maneuvering unit Patent
[NASA-CASE-XMS-05304] c05 N71-12336
Fluid power transmission Patent
[NASA-CASE-XMS-01445] c12 N71-16031
Subgravity simulator Patent
[NASA-CASE-XMS-04798] c11 N71-21474
Pneumatic amplifier Patent
[NASA-CASE-MSC-12121-1] c15 N71-27147

JOHNSON, J. C., JR.
Mechanical actuator Patent
[NASA-CASE-XGS-04548] c15 N71-24045

JOHNSON, J. D.
Wrist joint assembly
[NASA-CASE-MFS-23311-1] c54 N78-17676

JOHNSON, J. E.
Variable cycle gas turbine engines
[NASA-CASE-LEW-12916-1] c37 N78-17384

JOHNSON, J. E., JR.
Micro-fluid exchange coupling apparatus
[NASA-CASE-ARC-11114-1] c51 N81-14605

JOHNSON, J. L.
Method and apparatus for shaping and enhancing
acoustical levitation forces
[NASA-CASE-MFS-25050-1] c71 N61-15767

JOHNSON, J. L., JR.
High lift aircraft
[NASA-CASE-LAR-11252-1] c05 N75-25914

JOHNSON, E. G.
Positioning mechanism
[NASA-CASE-NFO-10679] c15 N72-21462

JOHNSON, R. C.
Enthalpy and stagnation temperature
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flow gas stream Patent
[NASA-CASE-XLE-00266] c14 N70-34156

JOHNSON, R. D.
Gas path seal
[NASA-CASE-NFO-12131-3] c37 N80-18400

JOHNSON, R. E.
Acquisition and tracking system for optical radar

[NASA-CASE-MFS-20125]	c16 N72-13437	Apparatus for determining thermophysical properties of test specimens [NASA-CASE-LAR-11883-1]	c09 N77-27131
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Lightning tracking system [NASA-CASE-KSC-10729-1]	c09 N73-32110		
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K

KABANA, W. F.
Butt welder for fine gauge tungsten/rhenium thermocouple wire
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KARLBAUM, W. E., JR.
Chromatically corrected virtual image display
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Chromatically corrected virtual image visual display
[NASA-CASE-LAR-12251-1] c74 N80-27185

KALISEB, J. A., JR.
Scannable beam forming interferometer antenna array system
[NASA-CASE-GSC-12365-1] c32 N80-28578

KALFAYAN, S. B.
Epoxy-aziridine polymer product Patent
[NASA-CASE-NPO-10701] c06 N71-28620

Strain gage mounting assembly
[NASA-CASE-NPO-13170-1] c35 N76-14430

Coal desulfurization process
[NASA-CASE-NPO-13937-1] c44 N78-31527

KALKBRENNER, B. W.
Heat transfer device
[NASA-CASE-NPO-11120-1] c34 N74-18552

KALLINS, C.
Rotary actuator
[NASA-CASE-NPO-10244] c15 N72-26371

KAMI, S.
Gas regulator Patent
[NASA-CASE-NPO-10298] c12 N71-17661

KAMINSKAS, R. A.
Penetrating radiation system for detecting the amount of liquid in a tank Patent
[NASA-CASE-MSC-12280] c27 N71-16348

KAMMEBEYER, K.
Mixture separation cell Patent
[NASA-CASE-XMS-02952] c18 N71-20742

KAMPINSKY, A.
Method and apparatus for determining electromagnetic characteristics of large surface area passive reflectors Patent
[NASA-CASE-XGS-02608] c07 N70-41678

Apparatus providing a directive field pattern and attitude sensing of a spin stabilized satellite Patent
[NASA-CASE-XGS-02607] c31 N71-23009

KANABUS, E. W.
Apparatus and method of inserting a microelectrode in body tissue or the like using vibration means
[NASA-CASE-NPO-13910-1] c52 N79-27836

KANBER, B.
Acoustic driving of rotor
[NASA-CASE-NPO-14005-1] c71 N79-20827

KANE, J. O.
Thermal barrier pressure seal
[NASA-CASE-MSC-18134-1] c37 N81-15363

KANE, T. B.
Spacecraft attitude control method and apparatus
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KAPUSTKA, R. B.
Method and apparatus for conditioning of nickel-cadmium batteries
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KARIGAN, G. H.
Accumulator
[NASA-CASE-MFS-15287-1] c34 N77-30399

KARLOTIS, A. B.
Compression test assembly
[NASA-CASE-LAR-10440-1] c14 N73-32323

KARSH, I.
Tape guidance system and apparatus for the provision thereof Patent
[NASA-CASE-XNP-09453] c08 N71-19420

Incremental tape recorder and data rate converter Patent
[NASA-CASE-XNP-02778] c08 N71-22710

KASPARBECK, W. E.
Precision stepping drive Patent
[NASA-CASE-MFS-14772] c15 N71-17692

Fine adjustment mount
[NASA-CASE-MFS-20249] c15 N72-11386

Adjustable force probe
[NASA-CASE-MFS-20760] c14 N72-33377

KAST, B. B.
Oil cooling system for a gas turbine engine
[NASA-CASE-LEW-12830-1] c07 N77-23106

Oil cooling system for a gas turbine engine
[NASA-CASE-LEW-12321-1] c37 N78-10467

KASTAN, B.
Absorptive splitter for closely spaced supersonic engine air inlets Patent
[NASA-CASE-XLA-02865] c28 N71-15563

KASTNER, S. O.
Diffractoid grating configuration for X-ray and ultraviolet focusing
[NASA-CASE-GSC-12357-1] c74 N80-21140

KATOW, M. S.
Multi-feed cone Cassegrain antenna Patent
[NASA-CASE-NPO-10539] c07 N71-11285

KATVALA, V. W.
Reaction cured glass and glass coatings
[NASA-CASE-ARC-11051-1] c27 N78-32260

Spray coating apparatus having a rotatable workpiece holder
[NASA-CASE-ARC-11110-1] c37 N78-32434

KATZ, L.
Force measuring instrument Patent
[NASA-CASE-XMF-00456] c14 N70-34705

Optimum predetection diversity receiving system Patent
[NASA-CASE-XGS-00740] c07 N71-23098

Apparatus for obtaining isotropic irradiation of a specimen
[NASA-CASE-MFS-20095] c24 N72-11595

Method and apparatus for supercooling and solidifying substances
[NASA-CASE-MFS-25242-1] c35 N81-24413

KATZ, M. B.
Temperature reducing coating for metals subject to flame exposure Patent
[NASA-CASE-XLE-00035] c33 N71-29151

KATZBERG, S. J.
Automatic focus control for facsimile cameras
[NASA-CASE-LAR-11213-1] c35 N75-15014

Spectrometer integrated with a facsimile camera
[NASA-CASE-LAR-11207-1] c35 N75-19613

Device for measuring the contour of a surface
[NASA-CASE-LAR-11869-1] c74 N78-27904

KATZEN, E. D.
Protected isotope heat source
[NASA-CASE-LEW-11227-1] c73 N75-30876

KATZIN, L.
Breakaway connector
[NASA-CASE-NPO-11140] c15 N72-17455

KAUFMAN, H. B.
Ion thruster cathode
[NASA-CASE-XLE-07087] c06 N69-39889

Ion rocket Patent
[NASA-CASE-XLE-00376] c28 N70-37245

Electrostatic ion engine having a permanent magnetic circuit Patent
[NASA-CASE-XLE-01124] c28 N71-14043

Electrostatic ion rocket engine Patent
[NASA-CASE-XLE-02066] c28 N71-15661

Ion beam deflector Patent
[NASA-CASE-LEW-10689-1] c28 N71-26173

KAUFMAN, J. W.
Maxometers (peak wind speed anemometers)
[NASA-CASE-MFS-20916] c14 N73-25460

Wind wheel electric power generator
[NASA-CASE-MFS-23515-1] c44 N80-21828

KAUFMAN, W. B.
High current electrical lead
[NASA-CASE-LEW-10950-1] c33 N74-27683

KAUFMAN, J. J.
Lead-oxygen dc power supply system having a closed loop oxygen and water system
[NASA-CASE-MFS-23059-1] c44 N76-27664

KAVAYA, M. J.
Stark effect spectrophone for continuous absorption spectra monitoring
[NASA-CASE-NPO-15102-1] c25 N81-25159

KAZAROFF, J. H.
Heat exchanger and method of making
[NASA-CASE-LEW-12441-1] c34 N79-13289

Heat exchanger and method of making
[NASA-CASE-LEW-12441-2] c34 N80-24573

Heat exchanger and method of making
[NASA-CASE-LEW-12441-3] c44 N81-24519

KAZHOFF, A. I.
Method of making a cermet Patent
[NASA-CASE-LEW-10219-1] c18 N71-28729

KAZOKAS, G. P.
Vacuum leak detector
[NASA-CASE-LAR-11237-1] c35 N75-19612

KEAFER, L. S., JR.
Transmitting and reflecting diffuser
[NASA-CASE-LAR-10385-2] c70 N74-13436

Transmitting and reflecting diffuser
[NASA-CASE-LAR-10385-3] c74 N78-15879

KEARNS, W. J.
Mount for thermal control system Patent
[NASA-CASE-NPO-10138] c33 N71-16357

KEATHLEY, W. H.
Energy absorbing structure Patent Application
[NASA-CASE-MSC-12279-1] c15 N70-35679
Low onset rate energy absorber
[NASA-CASE-MSC-12279] c15 N72-17450

KEATING, J. H.
Method and apparatus for attaching physiological monitoring electrodes Patent
[NASA-CASE-XPR-07658-1] c05 N71-26293

KEEFER, J. H.
Phonocardiogram simulator Patent
[NASA-CASE-XKS-10804] c05 N71-24606

KEENE, W. H.
Clear air turbulence detector
[NASA-CASE-MFS-21244-1] c36 N75-15028
Focused laser Doppler velocimeter
[NASA-CASE-MFS-23178-1] c35 N77-16493

KEETON, A. R.
Sodium storage and injection system
[NASA-CASE-NPO-14384-1] c37 N80-16494

KEHLET, A. B.
Parachute glider Patent
[NASA-CASE-XLA-00898] c02 N70-36804
Space and atmospheric reentry vehicle Patent
[NASA-CASE-IGS-00260] c31 N70-37924
Space capsule Patent
[NASA-CASE-XLA-00149] c31 N70-37938
Space capsule Patent
[NASA-CASE-XLA-01332] c31 N71-15664

KELBAUGH, B. H.
Automatic instrument for chemical processing to detect microorganism in biological samples by measuring light reactions
[NASA-CASE-GSC-11169-2] c05 N73-32011

KELLER, E. E.
Heat exchanger
[NASA-CASE-MFS-22991-1] c34 N77-10463

KELLER, G. C.
Plural beam antenna
[NASA-CASE-GSC-11013-1] c09 N73-19234

KELLER, O. P.
Pressure regulating system Patent
[NASA-CASE-XNP-00450] c15 N70-38603

KELLEY, J. R.
Mechanical stability augmentation system Patent
[NASA-CASE-XLA-06339] c02 N71-13422

KELLEY, W. W.
Pitch attitude stabilization system utilizing engine pressure ratio feedback signals
[NASA-CASE-LAB-12562-1] c08 N81-26152

KELLS, M. C.
Device for measuring pressure Patent
[NASA-CASE-XAC-04458] c14 N71-24232

KELLY, D. L.
Multistage aerospace craft
[NASA-CASE-XMP-02263] c05 N74-16907

KELLY, H. H.
Heat pipe honeycomb panel
[NASA-CASE-LAB-12637-1] c34 N81-12362

KELLY, W. L., IV
Spectrometer integrated with a facsimile camera
[NASA-CASE-LAB-11207-1] c35 N75-19613
Device for measuring the contour of a surface
[NASA-CASE-LAB-11869-1] c74 N78-27904

KELLY, W. W.
Velocity vector control system augmented with direct lift control
[NASA-CASE-LAB-12268-1] c08 N81-24106

KELSEY, E. L.
Transient-compensated SCR inverter
[NASA-CASE-XLA-08507] c09 N69-39984
SCR blocking pulse gate amplifier Patent
[NASA-CASE-XLA-07497] c09 N71-12514

KEMP, K. L.
Pneumatic mirror support system
[NASA-CASE-XLA-03271] c11 N69-24321

KEMP, R. F.
Apparatus for field strength measurement of a space vehicle Patent
[NASA-CASE-XLE-00820] c14 N71-16014

KEMP, R. H.
Thin-walled pressure vessel Patent
[NASA-CASE-XLE-04677] c15 N71-16577

KENDALL, J. H.
Resolution enhanced sound detecting apparatus
[NASA-CASE-NPO-14134-1] c71 N79-23753

KENDALL, J. H., JR.
Method of forming frozen spheres in a force-free drop tower
[NASA-CASE-NPO-14845-1] c31 N81-16328

KENDALL, J. H., SR.
Conically shaped cavity radiometer with a dual purpose cone winding Patent
[NASA-CASE-XNP-09701] c14 N71-26475
Black body cavity radiometer Patent
[NASA-CASE-NFO-10810] c14 N71-27323
Pressure letdown method and device for coal conversion systems
[NASA-CASE-NFO-15100-1] c28 N81-33306

KENDRICK, W. F.
Ablative resin Patent
[NASA-CASE-XLE-05913] c33 N71-14032
Reinforced structural plastics
[NASA-CASE-LEW-10199-1] c27 N74-23125

KENNEDY, B. W.
Electrical connector Patent Application
[NASA-CASE-MFS-14741] c09 N70-20737
Filter system for control of outgas contamination in vacuum Patent
[NASA-CASE-MFS-14711] c15 N71-26185
Method of making shielded flat cable Patent
[NASA-CASE-MFS-13687] c09 N71-28691
Shielded flat cable
[NASA-CASE-MFS-13687-2] c09 N72-22198
Polyimide resin-fiberglass cloth laminates for printed circuit boards
[NASA-CASE-MFS-20408] c18 N73-12604
Integrated circuit package with lead structure and method of preparing the same
[NASA-CASE-MFS-21374-1] c33 N74-12951

KENNEDY, A. J., III
Space suit
[NASA-CASE-MSC-12609-1] c05 N73-32012

KENNEY, R. L.
Geneva mechanism
[NASA-CASE-NPO-13281-1] c37 N75-13266

KENT, W. D.
Heat sterilizable patient ventilator
[NASA-CASE-NFO-13313-1] c54 N75-27761

KENYON, G. C.
Flight craft Patent
[NASA-CASE-XAC-02058] c02 N71-16087

KEPLER, C. E.
Tertiary flow injection thrust vectoring system Patent
[NASA-CASE-MFS-20831] c28 N71-29153

KEBLEY, J. J.
Portable appliance security apparatus
[NASA-CASE-GSC-12399-1] c33 N81-25299

KERLEY, J. J., JR.
Apparatus for vibrational testing of articles
[NASA-CASE-GSC-11302-1] c14 N73-13416

KERN, C. V.
Deformable vehicle wheel Patent
[NASA-CASE-MFS-20400] c31 N71-18611

KERN, J. D.
Magnetic recording head and method of making same Patent
[NASA-CASE-GSC-10097-1] c08 N71-27210

KERNODLE, B. H.
Inherent redundancy electric heater
[NASA-CASE-MFS-21462-1] c33 N74-14935

KERR, J. H.
Traffic survey system
[NASA-CASE-MFS-22631-1] c66 N76-19888

KERSEY, E. D., JR.
Angular displacement indicating gas bearing support system Patent
[NASA-CASE-XLA-09346] c15 N71-28740

KERSLAKE, W. E.
Ion thruster cathode
[NASA-CASE-XLE-07087] c06 N69-39889
Electronic cathode having a brush-like structure and a relatively thick oxide emissive coating Patent
[NASA-CASE-XLE-04501] c09 N71-23190

KERSTEN, L.
Wrist joint assembly
[NASA-CASE-MFS-23311-1] c54 N78-17676

KERWIN, W. J.
Nonmagnetic thermal motor for a magnetometer
[NASA-CASE-XAE-03786] c09 N69-21313
Demodulation system Patent
[NASA-CASE-XAC-04030] c10 N71-19472
Transducer circuit and catheter transducer Patent
[NASA-CASE-ARC-10132-1] c09 N71-24597
Active RC networks
[NASA-CASE-ARC-10042-2] c10 N72-11256

RC networks and amplifiers employing the same
[NASA-CASE-XAC-05462-2] c10 N72-17171

Active RC networks
[NASA-CASE-ARC-10020] c10 N72-17172

Multiloop RC active filter apparatus having low
parameter sensitivity with low amplifier gain
[NASA-CASE-ARC-10192] c09 N72-21245

Integrated structure vacuum tube
[NASA-CASE-ARC-10445-1] c31 N76-31365

KESSEL, J. E.
Plural recorder system
[NASA-CASE-XMS-06949] c09 N69-21467

KESSINGER, R. L.
Hearing aid malfunction detection system
[NASA-CASE-MSC-14916-1] c33 N78-1C375

KEY, C. F.
Nonflammable coating compositions
[NASA-CASE-MFS-20486-2] c27 N74-17283

KEYMONT, R. J.
Technique for control of free-flight rocket
vehicles Patent
[NASA-CASE-XLA-00937] c31 N71-17691

KHANNA, S. M.
Direct current transformer
[NASA-CASE-MFS-23659-1] c33 N79-17133

KIBBE, R. K.
Load cell protection device Patent
[NASA-CASE-XMS-06782] c32 N71-15974

KICHAK, R. A.
Inrush current limiter
[NASA-CASE-GSC-11789-1] c33 N77-14333

KIERRE, P. J., JR.
Thermal conductive connection and method of
making same Patent
[NASA-CASE-XMS-02087] c09 N70-41717

KIKIN, G. M.
Multiducted electromagnetic pump Patent
[NASA-CASE-NPO-10755] c15 N71-27084

Shell side liquid metal boiler
[NASA-CASE-NPO-16831] c33 N72-2C915

KILLALEA, W. P.
Clamping assembly for inertial components Patent
[NASA-CASE-XMS-02184] c15 N71-2C813

KIN, C.
Arterial pulse wave pressure transducer
[NASA-CASE-GSC-11531-1] c52 N74-27566

KIN, H. H.
A multichannel photoionization chamber for
absorption analysis Patent
[NASA-CASE-ERC-10044-1] c14 N71-27090

KIN, K. M.
Means for growing ribbon crystals without
subjecting the crystals to thermal
shock-induced strains
[NASA-CASE-NPO-14298-1] c76 N80-32244

KINBALL, R. B.
Apparatus for remote handling of materials
[NASA-CASE-LAR-10634-1] c37 N74-1E123

KINHARD, W. H.
Particle detection apparatus Patent
[NASA-CASE-XLA-00135] c14 N70-33322

Gas actuated bolt disconnect Patent
[NASA-CASE-XLA-00326] c03 N70-34667

Micrometeoroid velocity measuring device Patent
[NASA-CASE-XLA-00495] c14 N70-41332

Micrometeoroid penetration measuring device Patent
[NASA-CASE-XLA-00941] c14 N71-23240

Deployable pressurized cell structure for a
micrometeoroid detector
[NASA-CASE-LAR-10295-1] c35 N74-21062

Particulate and aerosol detector
[NASA-CASE-LAR-11434-1] c35 N76-22509

KINELL, D. K.
Four phase logic systems
[NASA-CASE-MSC-14240-1] c33 N75-14957

KING, C. B.
Method of obtaining permanent record of surface
flow phenomena Patent
[NASA-CASE-XLA-01353] c14 N70-41366

Method and apparatus for bonding a plastics
sleeve onto a metallic body Patent
[NASA-CASE-XLA-01262] c15 N71-21404

Dielectric molding apparatus Patent
[NASA-CASE-LAR-10121-1] c15 N71-26721

Butt welder for fine gauge tungsten/rhenium
thermocouple wire
[NASA-CASE-LAR-10103-1] c15 N73-14468

KING, H. J.
Gas regulator Patent
[NASA-CASE-NPO-10298] c12 N71-17661

KING, H. M.
Method of making impurity-type semiconductor
electrical contacts Patent
[NASA-CASE-XMF-01016] c26 N71-17818

Sprayable low density ablator and application
process
[NASA-CASE-MFS-23506-1] c24 N78-24290

KING, R. B.
Preparation of high purity copper fluoride
[NASA-CASE-LEW-10794-1] c06 N72-17093

KING, R. F.
Anthropomorphic master/slave manipulator system
[NASA-CASE-ARC-10756-1] c54 N77-32721

KING, R. W.
Method and apparatus for making a heat
insulating and ablative structure Patent
[NASA-CASE-XMS-02009] c33 N71-20834

High acceleration cable deployment system
[NASA-CASE-ARC-11256-1] c37 N79-23432

KING, W. L.
Gregorian all-reflective optical system
[NASA-CASE-GSC-12058-1] c74 N77-26942

KINKEL, J. F.
Data transfer system Patent
[NASA-CASE-NPO-12107] c08 N71-27255

KINSHARD, K. P.
Laser Doppler system for measuring three
dimensional vector velocity Patent
[NASA-CASE-MFS-20386] c21 N71-19212

KINO, G. S.
Traveling wave solid state amplifier utilizing a
semiconductor with negative differential
mobility
[NASA-CASE-HQN-10069] c33 N75-27251

KINSEL, R. C.
Signal multiplexer
[NASA-CASE-XGS-01110] c07 N69-24334

KINZLER, J. A.
Emergency escape system Patent
[NASA-CASE-MSC-12086-1] c05 N71-12345

Surface finishing
[NASA-CASE-MSC-12631-1] c24 N77-28225

Surface finishing
[NASA-CASE-MSC-12631-3] c27 N81-14077

Structural members, method and apparatus
[NASA-CASE-MSC-16217-1] c31 N81-27323

KIRBY, C. A.
Translatory shock absorber for attitude sensors
[NASA-CASE-MFS-22905-1] c19 N76-22284

KIRCHMAN, R. J.
Accelerometer with FM output Patent
[NASA-CASE-XLA-00492] c14 N70-34799

KIRSTEN, C. C.
Solar-powered pump
[NASA-CASE-NPO-13567-1] c44 N76-29701

KIS, G.
Optical alignment system Patent
[NASA-CASE-XNP-02029] c14 N70-41955

KISSEL, R. B.
Tetherline system for orbiting satellites
[NASA-CASE-MFS-23564-1] c15 N78-25119

Contour measurement system
[NASA-CASE-MFS-23726-1] c43 N79-26439

KISSELL, R. R.
Rate meter
[NASA-CASE-MFS-20418] c14 N73-24473

KISEMO, W.
Portable superclean air column device Patent
[NASA-CASE-XMF-03212] c15 N71-22721

KITTEL, P.
Refrigerator module, system and process
[NASA-CASE-ARC-11263-1] c31 N81-27328

KITTS, W. T.
Cryogenic connector for vacuum use Patent
[NASA-CASE-XGS-02441] c15 N70-41629

KLECHKE, E. W.
Nickel aluminide coated low alloy stainless steel
[NASA-CASE-LEW-11267-1] c17 N73-32414

KLERN, H.
Ion-exchange hollow fibers
[NASA-CASE-NPO-13309-1] c25 N81-19244

KLERN, H. L.
Apparatus for inspecting microfilm Patent
[NASA-CASE-MFS-20240] c14 N71-26788

KLERN, H. G.
Electrolytically regenerative hydrogen-oxygen
fuel cell Patent
[NASA-CASE-XLE-04526] c03 N71-11052

KLEINBERG, L. L.
 Stable amplifier having a stable quiescent point Patent
 [NASA-CASE-XGS-02812] c09 N71-19466
 Complementary regenerative switch Patent
 [NASA-CASE-XGS-02751] c09 N71-23015
 Monostable multivibrator
 [NASA-CASE-GSC-10082-1] c10 N72-20221
 Active tuned circuit
 [NASA-CASE-GSC-11340-1] c10 N72-33230
 Ultra-stable oscillator with complementary transistors
 [NASA-CASE-GSC-11513-1] c33 N74-20862
 Inductorless narrow-band filter/amplifier
 [NASA-CASE-GSC-12410-1] c33 N79-24260
 JFET oscillator
 [NASA-CASE-GSC-12555-1] c33 N80-26601

KLEINROCK, L.
 Data compression system
 [NASA-CASE-XNP-09785] c08 N69-21928
 Method and apparatus for data compression by a decreasing slope threshold test
 [NASA-CASE-NPO-10769] c08 N72-11171

KLINA, S. J.
 High temperature cobalt-base alloy Patent
 [NASA-CASE-XLE-00726] c17 N71-15644

KLINE, A. J.
 Capacitance multiplier and filter synthesizing network
 [NASA-CASE-NPO-11948-1] c33 N74-32712

KLINE, A. J., JR.
 Automatic frequency discriminators and control for a phase-lock loop providing frequency preset capabilities Patent
 [NASA-CASE-XMP-08665] c10 N71-19467

KLINGMAN, E. E., III
 Apparatus for calibrating an image dissector tube
 [NASA-CASE-MFS-22208-1] c33 N75-26244
 Electronic optical transfer function analyzer
 [NASA-CASE-MFS-21672-1] c74 N76-15935

KLISCH, J. A.
 Combustion products generating and metering device
 [NASA-CASE-GSC-11095-1] c14 N72-10375

KLOC, I.
 Penetrometer
 [NASA-CASE-NPO-11103-1] c35 N77-27367

KNAUER, W.
 Ion thruster
 [NASA-CASE-LEW-10770-1] c28 N72-22770

KNECHTEL, E. D.
 Two force component measuring device Patent
 [NASA-CASE-XAC-04886-1] c14 N71-20439
 Floating two force component measuring device Patent
 [NASA-CASE-XAC-04885] c14 N71-23790

KNOELL, A. C.
 Method of adhering bone to a rigid substrate using a graphite fiber reinforced bone cement
 [NASA-CASE-NPO-13764-1] c27 N78-17215
 Vehicular impact absorption system
 [NASA-CASE-NPO-14014-1] c37 N79-10420

KNOOS, S. P.
 Shock tube bypass piston tunnel
 [NASA-CASE-NPO-12109] c11 N72-22245

KO, W. L.
 Superplastically formed diffusion bonded metallic structure
 [NASA-CASE-FRC-11026-1] c39 N79-25424

KOBAYASHI, H. S.
 Pulse code modulated signal synchronizer
 [NASA-CASE-MSC-12462-1] c32 N74-20809
 Pulse code modulated signal synchronizer
 [NASA-CASE-MSC-12494-1] c32 N74-20810
 Receiving and tracking phase modulated signals
 [NASA-CASE-MSC-16170-2] c32 N81-16338
 Doppler radar having phase modulation of both transmitted and reflected return signals
 [NASA-CASE-MSC-18675-1] c32 N81-29312

KOBAYASHI, H. S.
 Bit error rate measurement above and below bit rate tracking threshold
 [NASA-CASE-MSC-12743-1] c32 N79-10263

KOCH, E. F.
 Expulsion bladder-equipped storage tank structure Patent
 [NASA-CASE-XNP-00612] c11 N70-38182
 Combined pressure regulator and shutoff valve
 [NASA-CASE-NPO-13201-1] c37 N75-15050

KOCH, K. F.
 CRT blanking and brightness control circuit
 [NASA-CASE-KSC-10647-1] c10 N72-31273

KOCH, N. G.
 Multispectral scanner optical system
 [NASA-CASE-MSC-18255-1] c74 N80-33210

KOCZELA, L. J.
 Adaptive voting computer system
 [NASA-CASE-MSC-13932-1] c62 N74-14920

KODIS, B. D.
 Clear air turbulence detector
 [NASA-CASE-ERC-10081] c14 N72-28437

KORFF, G. A.
 Laser apparatus
 [NASA-CASE-GSC-12237-1] c36 N80-14384
 Off-axis coherently pumped laser
 [NASA-CASE-GSC-12592-1] c36 N81-12407

KOJIMA, G. K.
 Miniature implantable ultrasonic echosonometer
 [NASA-CASE-ARC-11035-1] c52 N79-18580

KOLBLY, B. B.
 High power microwave power divider Patent
 [NASA-CASE-NPO-11031] c07 N71-33606
 System for controlling the operation of a variable signal device
 [NASA-CASE-NPO-11064] c07 N72-11150

KOLBY, B. B.
 Direct reading inductance meter
 [NASA-CASE-NPO-13792-1] c35 N77-32455

KOLIAD, K. M.
 Copper doped polycrystalline silicon solar cell
 [NASA-CASE-NFO-14670-1] c44 N81-19558

KOLOBOFF, G. J.
 Amplitude steered array
 [NASA-CASE-GSC-11446-1] c33 N74-20860

KOLSTEE, H. M.
 Radiator deployment actuator Patent
 [NASA-CASE-MSC-11817-1] c15 N71-26611

KONIGSBERG, E.
 Accelerometer telemetry system
 [NASA-CASE-ARC-10849-1] c17 N76-29347

KOPELSON, S.
 Rate augmented digital to analog converter Patent
 [NASA-CASE-XLA-07828] c08 N71-27057

KOPETSKI, P. J.
 Ring counter
 [NASA-CASE-XGS-03095] c09 N69-27463

KOFIA, L. P.
 Transmitting and reflecting diffuser
 [NASA-CASE-LAR-10385-2] c70 N74-13436
 Transmitting and reflecting diffuser
 [NASA-CASE-LAR-10385-3] c74 N78-15879

KORABOWSKI, J. J.
 Pressure garment joint Patent
 [NASA-CASE-XMS-09636] c05 N71-12344
 Method of forming a root cord restrained convolute section
 [NASA-CASE-MSC-12398] c05 N72-20098

KORDIS, E. E.
 High intensity heat and light unit Patent
 [NASA-CASE-XLA-00141] c09 N70-33312

KORNFELD, D. M.
 Process for preparation of large-particle-size monodisperse latexes
 [NASA-CASE-MFS-25000-1] c25 N81-19242

KORSCH, D. G.
 Anastigmatic three-mirror telescope
 [NASA-CASE-MFS-23675-1] c89 N79-10969

KORUS, R. A.
 Process for the preparation of fluorine containing crosslinked elastomeric polytriazine and product so produced
 [NASA-CASE-ABC-11248-1] c27 N81-17259

KORVIN, W.
 Self-erecting reflector Patent
 [NASA-CASE-XGS-09190] c31 N71-16102
 Tracking antenna system Patent
 [NASA-CASE-GSC-10553-1] c07 N71-19854
 Antenna array at focal plane of reflector with coupling network for beam switching Patent
 [NASA-CASE-GSC-10220-1] c07 N71-27233

KOSCHNEDEB, L. A.
 Bi-polar phase detector and corrector for split phase PCM data signals Patent
 [NASA-CASE-XGS-01590] c07 N71-12392

KOSMAHL, H. G.
 Linear magnetic brake with two windings Patent
 [NASA-CASE-XLE-05079] c15 N71-17652

Electrostatic collector for charged particles
[NASA-CASE-LEW-11192-1] c09 N73-13208

Electron beam controller
[NASA-CASE-LEW-11617-1] c33 N74-10195

Multistage depressed collector for dual node operation
[NASA-CASE-LEW-13282-1] c33 N79-32463

Gyrottron transmitting tube
[NASA-CASE-LEW-13429-1] c33 N81-16384

Ladder supported ring bar circuit
[NASA-CASE-LEW-13570-1] c33 N81-24348

KOSMO, J. J.
Extravehicular tunnel suit system Patent
[NASA-CASE-MSC-12243-1] c05 N71-24728

KOTHE, E.
Helmet feedport
[NASA-CASE-XMS-09653] c54 N78-17680

KOURTIDES, D. A.
Low density bismaleimide-carbon microballoon composites
[NASA-CASE-ARC-11040-2] c24 N78-27184

Low density bismaleimide-carbon microballoon composites
[NASA-CASE-ARC-11040-1] c24 N79-16915

Resin composition, process for producing the same, product produced therefrom and process for producing said product
[NASA-CASE-ARC-11331-1] c27 N81-31363

KOVELL, S. P.
Method for etching copper Patent
[NASA-CASE-XGS-06306] c17 N71-16044

KOYBAYASHI, H. S.
Unbalanced quadriphase demodulator
[NASA-CASE-MSC-14840-1] c32 N77-24331

KOZIOL, J. S., JR.
Aircraft control system
[NASA-CASE-ERC-10439] c02 N73-19004

KRAMER, F.
Device for suppressing sound and heat produced by high-velocity exhaust jets Patent
[NASA-CASE-XMF-01813] c28 N70-41582

KRAMER, J. S.
Apparatus for determining thermophysical properties of test specimens
[NASA-CASE-LAR-11883-1] c09 N77-27131

KRAMER, M.
Electronic amplifier with power supply switching Patent
[NASA-CASE-XMS-00945] c09 N71-10798

Power supply Patent
[NASA-CASE-XMS-02159] c10 N71-22961

KRASIN, F. E.
Discriminator aided phase lock acquisition for suppressed carrier signals
[NASA-CASE-NPO-14311-1] c32 N79-14276

KRATZER, R. H.
Preparation of perfluorinated imidoylamidoximes
[NASA-CASE-ARC-11267-1] c23 N80-26386

Preparation of perfluorinated 1,2,4-oxadiazoles
[NASA-CASE-ARC-11267-2] c25 N80-26407

KRAUSE, F. E.
Passive optical wind and turbulence detection system Patent
[NASA-CASE-XMF-14032] c20 N71-16340

KRAUSE, I. A.
Satellite interlace synchronization system
[NASA-CASE-GSC-10390-1] c07 N72-11149

KRAUSE, L. E.
Enthalpy and stagnation temperature determination of a high temperature laminar flow gas stream Patent
[NASA-CASE-XLE-00266] c14 N70-34156

Sensing probe
[NASA-CASE-LEW-10281-1] c14 N72-17327

KRAUSE, M. C.
Focused laser Doppler velocimeter
[NASA-CASE-MFS-23178-1] c35 N77-10493

Wind measurement system
[NASA-CASE-MFS-23362-1] c47 N77-10753

KRAUSE, S. J.
Method and device for determining battery state of charge Patent
[NASA-CASE-NPO-10194] c03 N71-20407

KRAUSHAAR, W. L.
Coaxial anode wire for gas radiation counters
[NASA-CASE-GSC-11492-1] c35 N74-26949

KRAY, W. P.
Synthesis of multifunction triaryltrifluoroethanes
[NASA-CASE-ARC-11097-1] c23 N78-22154

Synthesis of multifunction triaryltrifluoroethanes
[NASA-CASE-ARC-11097-2] c23 N78-22155

KREISMAN, W. S.
Inflation system for balloon type satellites Patent
[NASA-CASE-XGS-03351] c31 N71-16081

Bakeable McLeod gauge
[NASA-CASE-XGS-01293-1] c35 N79-33450

KRIEVE, W. P.
High-voltage cable Patent
[NASA-CASE-XNP-00738] c09 N70-38201

KROPP, C. J.
Determination of spot weld quality Patent
[NASA-CASE-XNP-02588] c15 N71-18613

KRSEK, A., JR.
Optical torque meter Patent
[NASA-CASE-XLE-00503] c14 N70-34818

KRUPHIC, A. C.
Method for detecting hydrogen gas
[NASA-CASE-XMP-03873] c06 N69-39733

Inorganic thermal control coatings
[NASA-CASE-MFS-20011] c18 N72-22566

Nonflammable coating compositions
[NASA-CASE-MFS-20486-2] c27 N74-17283

Stainless steel panel for selective absorption of solar energy and the method of producing said panel
[NASA-CASE-MFS-23518-2] c44 N77-31611

Method for making an aluminum or copper substrate panel for selective absorption of solar energy
[NASA-CASE-MFS-23518-1] c44 N79-11469

Aluminum or copper substrate panel for selective absorption of solar energy
[NASA-CASE-MFS-23518-3] c44 N80-16452

KUBACKI, R. H.
Boron trifluoride coatings for thermoplastic materials and method of applying same in glow discharge
[NASA-CASE-ARC-11057-1] c27 N78-31233

Process for producing a well-adhered durable optical coating on an optical plastic substrate
[NASA-CASE-ARC-11039-1] c74 N78-32854

KUBICA, A. J.
Decomposition unit Patent
[NASA-CASE-XMS-00583] c28 N70-38504

KUBICZ, A. P.
Signal path series step biased multidevice high efficiency amplifier Patent
[NASA-CASE-GSC-10668-1] c07 N71-28430

Power responsive overload sensing circuit Patent
[NASA-CASE-GSC-10667-1] c10 N71-33129

Infinite range electronics gain control circuit
[NASA-CASE-GSC-10786-1] c10 N72-28241

KUBIK, C. F.
Method and construction for protecting heat sensitive bodies from thermal radiation and convective heat Patent
[NASA-CASE-XNP-01310] c33 N71-28852

KUBIK, J. S.
Device for preventing high voltage arcing in electron beam welding Patent
[NASA-CASE-XMF-08522] c15 N71-19486

KUBOKAWA, C. C.
Fastener apparatus Patent
[NASA-CASE-ARC-10140-1] c15 N71-17653

KUEBLER, M. E.
Method and means for damping nutation in a satellite Patent
[NASA-CASE-XMF-00442] c31 N71-10747

KUENZLY, J. D.
Low thrust monopropellant engine
[NASA-CASE-GSC-12194-2] c20 N79-15151

KUGATH, D. A.
Remote manipulator system
[NASA-CASE-MFS-22022-1] c37 N76-15460

KUHN, R. P., JR.
Universal restrainer and joint Patent
[NASA-CASE-XNP-02278] c15 N71-28951

Internally supported flexible duct joint
[NASA-CASE-MFS-19193-1] c37 N75-19686

KUHNS, P. H.
Generator for a space power system Patent
[NASA-CASE-XLE-04250] c09 N71-20446

KUPPERIAN, J. E., JR.
Low friction magnetic recording tape Patent
[NASA-CASE-XGS-00373] c23 N71-15978

KURAL, M. H.
Strain arrestor plate for fused silica tile

[NASA-CASE-MSC-14182-1] c27 N76-14264
KURIGER, W. L.
 Short range laser obstacle detector
 [NASA-CASE-NPO-11856-1] c36 N74-15145
KURPLE, W.
 Bit error rate measurement above and below bit
 rate tracking threshold
 [NASA-CASE-MSC-12743-1] c32 N79-14263
KURTZ, R. L.
 Hybrid holographic system using reflected and
 transmitted object beams simultaneously Patent
 [NASA-CASE-MFS-20074] c16 N71-15565
 Multiple image storing system for high speed
 projectile holography
 [NASA-CASE-MFS-20596] c14 N72-17324
 Real time moving scene holographic camera system
 [NASA-CASE-MFS-21087-1] c35 N74-17153
 Holographic system for nondestructive testing
 [NASA-CASE-MFS-21704-1] c35 N75-25124
 Real time, large volume, moving scene
 holographic camera system
 [NASA-CASE-MFS-22537-1] c35 N75-27328
 Holographic motion picture camera with Doppler
 shift compensation
 [NASA-CASE-MFS-22517-1] c35 N76-18402
 Projection system for display of parallax and
 perspective
 [NASA-CASE-MFS-23194-1] c35 N78-17357
 Hybrid holographic non-destructive test system
 [NASA-CASE-MFS-23114-1] c38 N78-32447
KURVIN, C. W.
 Remote platform power conserving system
 [NASA-CASE-GSC-11182-1] c15 N75-13007
KURYLO, M. J., III
 Ultraviolet atomic emission detector
 [NASA-CASE-HQN-10756-1] c14 N72-25428
KURZHALS, P. R.
 Spacecraft experiment pointing and attitude
 control system Patent
 [NASA-CASE-XLA-05464] c21 N71-14132
 Attitude control and damping system for
 spacecraft Patent
 [NASA-CASE-XLA-02551] c21 N71-21708
KUSHIDA, R. O.
 Hydrogen rich gas generator
 [NASA-CASE-NPO-13342-1] c37 N76-16446
 Hydrogen rich gas generator
 [NASA-CASE-NPO-13342-2] c44 N76-29700
KNONG, H.
 The 1,2,4-oxadiazole elastomers
 [NASA-CASE-ARC-11253-1] c27 N81-17262
KNOWGS, H.
 Bifunctional monomers having terminal oxime and
 cyano or amidine groups
 [NASA-CASE-ARC-11253-3] c27 N81-24256

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LA RUSSA, F. J.
 Array phasing device Patent
 [NASA-CASE-BRC-10046] c10 N71-18722
LA VIGNA, T. A.
 Buck boost voltage regulation circuit Patent
 [NASA-CASE-GSC-10735-1] c10 N71-26085
LACEY, R. E.
 Infusible silazane polymer and process for
 producing same
 [NASA-CASE-XMP-02526-1] c27 N79-21190
LACKNER, H. G.
 Method and apparatus of simulating zero gravity
 conditions Patent
 [NASA-CASE-MFS-12750] c27 N71-16223
 Method and apparatus for checking the stability
 of a setup for making reflection type holograms
 [NASA-CASE-MFS-11455-1] c35 N74-15146
LACY, L. L.
 Containerless high temperature calorimeter
 apparatus
 [NASA-CASE-MFS-23923-1] c35 N81-19426
 Method and apparatus for supercooling and
 solidifying substances
 [NASA-CASE-MFS-25242-1] c35 N81-24413
LAPLAMB, D. T.
 Pseudonoise code tracking loop
 [NASA-CASE-MSC-18035-1] c32 N81-15179
LAIACONA, P. P.
 Bonding of reinforced Teflon to metals
 [NASA-CASE-MFS-20482] c15 N72-22492

**Method of preparing graphite reinforced aluminum
 composite**
 [NASA-CASE-MFS-21077-1] c24 N75-28135
LAINÉ, D. D.
 Electromechanical actuator
 [NASA-CASE-XNP-05975] c15 N69-23185
LAMAR, J. E.
 Vortex-lift roll-control device
 [NASA-CASE-LAR-11868-2] c08 N79-14108
LAMB, R. E.
 Hypersonic reentry vehicle Patent
 [NASA-CASE-XMS-04142] c31 N70-41631
LAMBSON, E. H.
 Pressure control valve
 [NASA-CASE-ARC-11251-1] c37 N81-17433
 Spine immobilization apparatus
 [NASA-CASE-ARC-11167-1] c52 N81-25662
LAMPERT, H. M.
 Bismuth-lead coatings for gas bearings used in
 atmospheric environments and vacuum chambers
 Patent
 [NASA-CASE-XGS-02011] c15 N71-20739
LAMPTON, E. L.
 Resistive anode image converter
 [NASA-CASE-HQN-10876-1] c33 N76-27473
LANDAUER, F. E.
 Means for generating a sync signal in an FM
 communication system Patent
 [NASA-CASE-XNP-10830] c07 N71-11281
LANDAUER, F. E., JR.
 Multispectral imaging and analysis system
 [NASA-CASE-NPO-13691-1] c43 N79-17288
LANDEL, R. F.
 Method for controlling vapor content of a gas
 [NASA-CASE-NPO-10633] c03 N72-28025
 Parallel-plate viscometer with double diaphragm
 suspension
 [NASA-CASE-NPO-11387] c14 N73-14429
 Preparation of alkali metal dispersions
 [NASA-CASE-XNP-08876] c17 N73-28573
 Polymeric compositions and their method of
 manufacture
 [NASA-CASE-NPO-10424-1] c27 N81-24258
LANDES, H. S.
 Active microwave irises and windows
 [NASA-CASE-LAR-10513-1] c07 N72-25170
 Thin film microwave iris
 [NASA-CASE-LAR-10511-1] c09 N72-29172
LANE, J. E.
 Wide range dynamic pressure sensor
 [NASA-CASE-ARC-10263-1] c14 N72-22438
LANEY, C. C., JR.
 Micrometeoroid velocity measuring device Patent
 [NASA-CASE-XLA-00495] c14 N70-41332
 Micrometeoroid penetration measuring device Patent
 [NASA-CASE-XLA-00941] c14 N71-23240
LANFORD, W. E.
 Folding apparatus Patent
 [NASA-CASE-XLA-00137] c15 N70-33180
 Reflector space satellite Patent
 [NASA-CASE-XLA-00138] c31 N70-37981
LANG, R.
 Venting device for pressurized space suit helmet
 Patent
 [NASA-CASE-XMS-09652-1] c05 N71-26333
 Protective garment ventilation system
 [NASA-CASE-XMS-04928] c54 N78-17679
LANGR, O. H.
 Continuous detonation reaction engine Patent
 [NASA-CASE-XMP-06926] c28 N71-22983
LANGR, R. A.
 Wideband heterodyne receiver for laser
 communication system
 [NASA-CASE-GSC-12053-1] c32 N77-28346
LANGSHIRE, R. V.
 Quadrupole mass filter with means to generate a
 noise spectrum exclusive of the resonant
 frequency of the desired ions to deflect
 stable ions
 [NASA-CASE-XNP-04231] c14 N73-32325
LAHSING, F. L.
 A stable density-stratification solar pond
 [NASA-CASE-NFO-15419-1] c44 N81-27599
LAHSING, J. C., JR.
 Method and apparatus for optically monitoring
 the angular position of a rotating mirror
 [NASA-CASE-GSC-11353-1] c74 N74-21304
LANTZ, E.
 Gaseous control system for nuclear reactors

[NASA-CASE-XLE-04599] c22 N72-20597
LARK, R. F.
 Hybrid composite laminate structures
 [NASA-CASE-LEW-12118-1] c24 N77-27188
LARNER, J. W.
 Conforming polisher for aspheric surface of
 revolution Patent
 [NASA-CASE-XGS-02884] c15 N71-22705
LARSON, L. L.
 Coaxial injector for reaction motors
 [NASA-CASE-NPO-11095] c15 N72-25455
LARSON, T. P.
 Filter regeneration systems
 [NASA-CASE-MSC-14273-1] c34 N75-33342
LATHAM, E. A.
 The engine air intake system
 [NASA-CASE-ARC-10761-1] c07 N77-18154
 Aircraft engine nozzle
 [NASA-CASE-ARC-10977-1] c07 N80-32392
LATTO, W. T., JR.
 Small rocket engine Patent
 [NASA-CASE-XLE-00685] c28 N70-41992
LAU, K. Y.
 A fiber optic transmission line stabilization
 apparatus and method
 [NASA-CASE-NPO-15036-1] c74 N80-34250
LAUB, J. B.
 Attitude control for spacecraft Patent
 [NASA-CASE-XNP-00294] c21 N70-36938
 Slit regulated gas journal bearing Patent
 [NASA-CASE-XNP-00476] c15 N70-38620
LAUDENSLAGER, J. B.
 Pulse switching for high energy lasers
 [NASA-CASE-NPO-14556-1] c36 N79-21336
LAUDERDALE, W. B.
 Method and apparatus for securing to a
 spacecraft Patent
 [NASA-CASE-MFS-11133] c31 N71-16222
LAUDENSLAGER, J. B.
 Charge transfer reaction laser with
 preionization means
 [NASA-CASE-NPO-13945-1] c36 N78-27402
LAUE, E. G.
 Irradiance measuring device
 [NASA-CASE-NPO-11493] c14 N73-12447
 Wind sensor
 [NASA-CASE-NPO-13462-1] c35 N76-24524
 Passive intrusion detection system
 [NASA-CASE-NPO-13804-1] c33 N80-23559
 Cloud cover sensor
 [NASA-CASE-NPO-14936-1] c47 N80-26992
LAUE, H. H.
 Driving lamps by induction
 [NASA-CASE-MFS-21214-1] c09 N73-30181
LAUE, J. H.
 Multi-mission module Patent
 [NASA-CASE-XMF-01543] c31 N71-17730
LAUGHLIN, C. R., JR.
 Position location system and method Patent
 [NASA-CASE-GSC-10087-2] c21 N71-13958
 Position location and data collection system and
 method Patent
 [NASA-CASE-GSC-10083-1] c30 N71-16090
 Traffic control system and method Patent
 [NASA-CASE-GSC-10087-1] c02 N71-15287
 Diversity receiving system with diversity phase
 lock Patent
 [NASA-CASE-XGS-01222] c10 N71-20841
 Position location system and method
 [NASA-CASE-GSC-10087-3] c07 N72-12080
 Doppler compensation by shifting transmitted
 object frequency within limits
 [NASA-CASE-GSC-10087-4] c07 N73-20174
LAUNAN, E. A.
 Hydrogen-fueled engine
 [NASA-CASE-NPO-13763-1] c44 N78-33526
LAURENCE, J. C.
 Method of fabricating a twisted composite
 superconductor
 [NASA-CASE-LEW-11015] c26 N73-32571
LAURIE, R. O.
 Adjustable mount for a trihedral mirror Patent
 [NASA-CASE-XNP-08907] c23 N71-29123
LAVERGNE, E. C.
 Position location and data collection system and
 method Patent
 [NASA-CASE-GSC-10083-1] c30 N71-16090
LAWHITE, E.
 Drying apparatus for photographic sheet material

[NASA-CASE-GSC-11074-1] c14 N73-28489
LAWING, P. L.
 Hypersonic airbreathing missile
 [NASA-CASE-LAR-12264-1] c15 N78-32168
 Cooling system for high speed aircraft
 [NASA-CASE-LAR-12406-1] c05 N81-26114
LAWRENCE, E. D.
 Variable frequency oscillator with temperature
 compensation Patent
 [NASA-CASE-XNP-03916] c09 N71-28810
LAWRENCE, T. R.
 Focused laser Doppler velocimeter
 [NASA-CASE-MFS-23178-1] c35 N77-10493
 Wind measurement system
 [NASA-CASE-MFS-23362-1] c47 N77-10753
LAWSON, A. G.
 Modified spiral wound retaining ring
 [NASA-CASE-LAR-12361-1] c37 N81-12422
LAWSON, B. D.
 Assembly for recovering a capsule Patent
 [NASA-CASE-XMF-00641] c31 N70-36410
 Space capsule ejection assembly Patent
 [NASA-CASE-XMF-03169] c31 N71-15675
 Mount for continuously orienting a collector
 dish in a system adapted to perform both
 diurnal and seasonal solar tracking
 [NASA-CASE-MFS-23267-1] c35 N77-20401
LAWSON, D. D.
 Polymeric electrolytic hygrometer
 [NASA-CASE-NPO-13948-1] c35 N78-25391
 Dual membrane hollow fiber fuel cell and method
 of operating same
 [NASA-CASE-NPO-13732-1] c44 N79-10513
 Potential heat exchange fluids for use in
 sulfuric acid vaporizers
 [NASA-CASE-NPO-15015-1] c25 N80-23394
LAYLAND, J. W.
 Communications link for computers
 [NASA-CASE-NPO-11161] c08 N72-25207
 Digital demodulator-correlator
 [NASA-CASE-NPO-13982-1] c32 N79-14267
LE BEL, P. J.
 Ablation sensor Patent
 [NASA-CASE-XLA-01794] c33 N71-21586
LE DOUX, P. H.
 Bacteriostatic conformal coating and methods of
 application Patent
 [NASA-CASE-GSC-10007] c18 N71-16046
LE VAY, K. H.
 Holder for crystal resonators Patent
 [NASA-CASE-XNP-03637] c15 N71-21311
LEATHERWOOD, J. D.
 Active vibration isolator for flexible bodies
 Patent
 [NASA-CASE-LAR-10106-1] c15 N71-27169
LEATHERWOOD, J. B.
 Hide quality meter
 [NASA-CASE-LAR-12882-1] c54 N81-31848
LEAVY, W. A.
 Switching mechanism with energy storage means
 Patent
 [NASA-CASE-XGS-00473] c03 N70-38713
 Antenna deployment mechanism for use with a
 spacecraft
 [NASA-CASE-GSC-12331-1] c18 N80-14183
LEBLANC, L. P.
 Thermocouple, multiple junction reference oven
 [NASA-CASE-FRC-10112-1] c35 N81-26431
LEDBETTER, P. E.
 Method of bonding plasticized elastomer to metal
 and article produced thereby
 [NASA-CASE-MFS-25181-1] c27 N81-16238
LEE, C. E.
 Trigonometric vehicle guidance assembly which
 aligns the three perpendicular axes of two
 three-axes systems Patent
 [NASA-CASE-XNP-00684] c21 N71-21688
LEE, D. A.
 Hermetically sealed explosive release mechanism
 Patent
 [NASA-CASE-XGS-00824] c15 N71-16078
LEE, D. H.
 Ignition means for monopropellant Patent
 [NASA-CASE-XNP-00876] c28 N70-41311
LEE, J. H.
 Solar driven liquid metal MHD power generator
 [NASA-CASE-LAR-12495-1] c44 N81-32609
LEE, J. S.
 High voltage transistor circuit Patent

[NASA-CASE-XNP-06937]	c09 N71-19516	Reaction cured glass and glass coatings	
LEE, M. C.		[NASA-CASE-ARC-11051-1]	c27 N78-32260
Dual resonant cavity absorption cell Patent		Fibrous refractory composite insulation	
[NASA-CASE-LAR-10305]	c14 N71-26137	[NASA-CASE-ARC-11169-1]	c24 N79-24062
Acoustic suspension system		Adjustable high emittance gap filler	
[NASA-CASE-NPO-15435-1]	c71 N81-27887	[NASA-CASE-ARC-11310-1]	c27 N80-23454
LEE, B. D.		LEISS, A.	
Telemetry actuated switch		Air frame drag balance Patent	
[NASA-CASE-ARC-10105]	c09 N72-17153	[NASA-CASE-XLA-00113]	c14 N70-33386
Metallic intrusion detector system		LEMCOR, M. M.	
[NASA-CASE-ARC-10265-1]	c10 N72-28240	Attaching of strain gages to substrates	
Intruder detection system		[NASA-CASE-FRC-10093-1]	c35 N80-20560
[NASA-CASE-ARC-10097-2]	c07 N73-25160	LEMON, P. B.	
Ultrasonic biomedical measuring and recording apparatus		Metallic hot wire anemometer	
[NASA-CASE-ARC-10597-1]	c52 N74-20726	[NASA-CASE-ARC-10911-1]	c35 N77-20400
Bio-isolated dc operational amplifier		LEMON, P. H.	
[NASA-CASE-ARC-10596-1]	c33 N74-21851	Broadband modified turnstile antenna Patent	
Reference apparatus for medical ultrasonic transducer		[NASA-CASE-NSC-12209]	c09 N71-24842
[NASA-CASE-ARC-10753-1]	c54 N75-27760	LENETT, S. D.	
Biomedical ultrasonoscope		Receiving and tracking phase modulated signals	
[NASA-CASE-ARC-10994-1]	c52 N76-33835	[NASA-CASE-NSC-16170-2]	c32 N81-16338
Biomedical ultrasonoscope		LENNON, C. L.	
[NASA-CASE-ARC-10994-2]	c52 N79-26771	Remote lightning monitor system	
Intrusion detection method and apparatus		[NASA-CASE-KSC-11031-1]	c33 N79-11315
[NASA-CASE-ARC-11317-1]	c35 N81-19430	Lightning discharge identification system	
LEE, S. H.		[NASA-CASE-KSC-11099-1]	c33 N79-25313
Method and apparatus for producing an image from a transparent object		LENT, W. E.	
[NASA-CASE-GSC-11989-1]	c74 N77-28932	Method for fiberizing ceramic materials Patent	
LEE, S. Y.		[NASA-CASE-XNP-00597]	c18 N71-23088
Physical correction filter for improving the optical quality of an image		LEON, H. A.	
[NASA-CASE-HQN-10542-1]	c74 N75-25706	Stirring apparatus for plural test tubes Patent	
LEE, W. S.		[NASA-CASE-IAC-06956]	c15 N71-21177
Surface finishing		Automatic real-time pair-feeding system for animals	
[NASA-CASE-NSC-12631-1]	c24 N77-28225	[NASA-CASE-ARC-10302-1]	c51 N74-15778
Surface finishing		LEONARD, B. T.	
[NASA-CASE-NSC-12631-3]	c27 N81-14077	Alignment apparatus using a laser having a gravitationally sensitive cavity reflector	
LEEB, W. E.		[NASA-CASE-ARC-10444-1]	c16 N73-33397
Method and apparatus for splitting a beam of energy		LEFF, D. R.	
[NASA-CASE-GSC-12083-1]	c73 N78-32848	Phototropic composition of matter	
LEEPER, H. A.		[NASA-CASE-XGS-03736]	c14 N72-22443
High efficiency multifrequency feed		LEBNER, B. B.	
[NASA-CASE-GSC-11909]	c32 N74-20863	Method of carbonizing polyacrylonitrile fibers and resulting product	
LEES, W. L.		[NASA-CASE-ARC-11261-1]	c24 N81-29164
Field ionization electrodes Patent		LEBNER, T.	
[NASA-CASE-ERC-10013]	c09 N71-26678	Modulator for tone and binary signals	
Method and apparatus for limiting field emission current		[NASA-CASE-GSC-11743-1]	c32 N75-24981
[NASA-CASE-ERC-10015-2]	c10 N72-27246	LESH, J. E.	
LEFFKE, W. O.		Multiple rate digital command detection system with range clean-up capability	
Flexibly connected support and skin Patent		[NASA-CASE-NPO-13753-1]	c32 N77-20289
[NASA-CASE-XLA-01027]	c31 N71-24035	LESKO, J. G., JR.	
LEPTNICH, R. F.		Programmable telemetry system Patent	
Multi-lobar scan horizon sensor Patent		[NASA-CASE-GSC-10131-1]	c07 N71-24624
[NASA-CASE-XGS-00809]	c21 N70-35427	LESNIEWSKI, R. J.	
LEGER, L. J.		Variable digital processor including a register for shifting and rotating bits in either direction Patent	
Method and device for detection of surface discontinuities or defects		[NASA-CASE-GSC-10186]	c08 N71-33110
[NASA-CASE-NSC-14187-1]	c35 N74-32879	Data processor with conditionally supplied clock signals	
Thermal insulation attaching means		[NASA-CASE-GSC-10975-1]	c08 N73-13187
[NASA-CASE-NSC-12619-2]	c27 N79-12221	LESSLEY, R. L.	
LEHMANN, R. H.		Rotating shaft seal Patent	
Fluid thrust control system		[NASA-CASE-XNP-02862-1]	c15 N71-26294
[NASA-CASE-XNP-05964-1]	c20 N79-21124	LESSMANN, G. G.	
LEIBECKI, H. F.		Bimetallic junctions	
Electrically conductive fluorocarbon polymer		[NASA-CASE-LEW-11573-1]	c26 N77-28265
[NASA-CASE-XLB-06774-2]	c06 N72-25150	LEVIN, H.	
LEIBERT, C. H.		Refractory porcelain enamel passive control coating for high temperature alloys	
Thermal barrier coating system		[NASA-CASE-MFS-22324-1]	c27 N75-27160
[NASA-CASE-LEW-12554-1]	c34 N78-18355	Thermal reactor and process	
LEIBOWITZ, L. P.		[NASA-CASE-NPO-14369-1]	c25 N80-20338
Annular arc accelerator shock tube		LEVIN, K. L.	
[NASA-CASE-NPO-13528-1]	c09 N77-10071	Lunar landing flight research vehicle Patent	
LEININGER, D. B.		[NASA-CASE-XPR-00929]	c31 N70-34966
Telephone multiline signaling using common signal pair		LEVINE, H. W.	
[NASA-CASE-KSC-11023-1]	c32 N79-23310	Atomic hydrogen maser with bulb temperature control to remove wall shift in maser output frequency	
LEIPOLD, M. H.		[NASA-CASE-HQN-10654-1]	c16 N73-13489
Method of controlling defect orientation in silicon crystal ribbon growth		Tunable cavity resonator with ramp shaped supports	
[NASA-CASE-NPO-13918-1]	c76 N79-11920	[NASA-CASE-HQN-10790-1]	c36 N74-11313
LEISER, D. B.		LEVINE, S. B.	
Silica reusable surface insulation		Fused silicide coatings containing discrete particles for protecting niobium alloys	
[NASA-CASE-ARC-10721-1]	c27 N76-22376		

[NASA-CASE-LEW-11179-1] c27 N76-16229
Corrosion resistant thermal barrier coating
[NASA-CASE-LEW-13088-1] c26 N81-25188

LEWIS, M.
Conforming polisher for aspheric surface of
revolution Patent
[NASA-CASE-XGS-02884] c15 N71-22705

LEWIS, C. A.
Distributed-switch Dicke radiometers
[NASA-CASE-GSC-12219-1] c35 N80-18359

LEVY, G. S.
Multi-feed cone Cassegrain antenna Patent
[NASA-CASE-NPO-10539] c07 N71-11285

LEWICKI, G. W.
High voltage transistor amplifier with constant
current load
[NASA-CASE-NPO-11023] c09 N72-17155
Thermomagnetic recording and magneto-optic
playback system having constant intensity
laser beam control
[NASA-CASE-NPO-11317-2] c36 N74-13205
Use of thin film light detector
[NASA-CASE-NPO-11432-2] c35 N74-15090
Stored charge transistor
[NASA-CASE-NPO-11156-2] c33 N75-31331
Magneto-optic detection system with noise
cancellation
[NASA-CASE-NPO-11954-1] c35 N78-29421
Thermomagnetic recording and magnetic-optic
playback system
[NASA-CASE-NPO-10872-1] c35 N79-16246
Manganese bismuth films with narrow transfer
characteristics for Curie-point switching
[NASA-CASE-NPO-11336-1] c76 N79-16678

LEWIS, B. F.
Photoelectron spectrometer with means for
stabilizing sample surface potential
[NASA-CASE-NPO-13772-1] c35 N78-10429

LEWIS, B. W.
Process for applying black coating to metals
Patent
[NASA-CASE-XLA-06199] c15 N71-24875
Barium release system
[NASA-CASE-LAR-10670-1] c06 N73-36097
Rocket having barium release system to create
ion clouds in the upper atmosphere
[NASA-CASE-LAR-10670-2] c15 N74-27360

LEWIS, D. J.
Mandrel for shaping solid propellant rocket fuel
into a motor casing Patent
[NASA-CASE-XLA-00304] c27 N70-34783
Solid propellant rocket motor and method of
making same
[NASA-CASE-XLA-1349] c20 N77-17143

LEWIS, G. W.
Subminiature insertable force transducer
[NASA-CASE-NPO-13423-1] c33 N75-31329
Miniature muscle displacement transducer
[NASA-CASE-NPO-13519-1] c33 N76-19338
Myocardium wall thickness transducer and
measuring method
[NASA-CASE-NPO-13644-1] c52 N76-29895
Catheter tip force transducer for cardiovascular
research
[NASA-CASE-NPO-13643-1] c52 N76-29896
Simultaneous muscle force and displacement
transducer
[NASA-CASE-NPO-14212-1] c52 N80-27072
Multifunctional transducer
[NASA-CASE-NPO-14329-1] c52 N81-20703

LEWIS, J. R.
Automatic transponder
[NASA-CASE-GSC-12075-1] c32 N77-31350

LEWIS, R.
High temperature ferromagnetic cobalt-base alloy
Patent
[NASA-CASE-XLE-03629] c17 N71-23248

LEWIS, T. L.
Acoustical transducer calibrating system and
apparatus
[NASA-CASE-FRC-10060-1] c14 N73-27379

LEWYN, L. L.
Analog-to-digital converter
[NASA-CASE-XNP-00477] c08 N73-28045

LI, S. P.
Induced junction solar cell and method of
fabrication
[NASA-CASE-NPO-13786-1] c44 N80-29835

LIBBEY, C. E.
Flexible wing deployment device Patent
[NASA-CASE-XLA-01220] c02 N70-41863

LIBBY, J. H.
Ultra-long monostable multivibrator employing
bistable semiconductor switch to allow
charging of timing circuit Patent
[NASA-CASE-XGS-00381] c09 N70-34819
Reversible ring counter employing cascaded
single SCR stages Patent
[NASA-CASE-XGS-01473] c09 N71-10673

LIBBY, W. F.
Continuous plasma light source
[NASA-CASE-XNP-04167-2] c25 N72-24753
Continuous plasma laser
[NASA-CASE-XNP-04167-3] c36 N77-19416

LIEBEROTTI, J.
Valving device for automatic refilling in
cryogenic liquid systems
[NASA-CASE-NPO-11177] c15 N72-17453

LIEBERMAN, S.
Resonant infrasonic gauging apparatus
[NASA-CASE-MSC-11847-1] c14 N72-11363

LIGHT, D. J.
Fixture for supporting articles during vibration
tests
[NASA-CASE-MFS-20523] c14 N72-27412

LIGHTSEY, G. R.
Preparation of polyimides from mixtures of
monomeric diamines and esters of
polycarboxylic acids
[NASA-CASE-LEW-11325-1] c06 N73-27980

LILLEY, A. E.
Clear air turbulence detector
[NASA-CASE-ERC-10081] c14 N72-28437

LIN, L. Y.
Signal processing apparatus for multiplex
transmission Patent
[NASA-CASE-NPO-10388] c07 N71-24622

LINDBERG, J. G.
Method and apparatus for varying thermal
conductivity Patent
[NASA-CASE-XNP-05524] c33 N71-24876

LINDBERG, R. A.
High temperature beryllium oxide capacitor
[NASA-CASE-LEW-11938-1] c33 N76-15373
Bimetallic junctions
[NASA-CASE-LEW-11573-1] c26 N77-28265

LINDERFELT, R. E.
An airlock
[NASA-CASE-MFS-20922] c31 N72-20840
Airlock
[NASA-CASE-MFS-20922-1] c18 N74-22136

LINDSEY, J. P., III
Flexible blade antenna Patent
[NASA-CASE-MSC-12101] c09 N71-18720

LINDSEY, R. S., JR.
Pulse stretcher for narrow pulses
[NASA-CASE-MSC-14130-1] c33 N74-32711
Random pulse generator
[NASA-CASE-MSC-14131-1] c33 N75-19515

LINDSEY, W. C.
Transition tracking bit synchronization system
[NASA-CASE-NPO-10844] c07 N72-20140
Data-aided carrier tracking loops
[NASA-CASE-NPO-11282] c10 N73-16205
Coherent receiver employing nonlinear coherence
detection for carrier tracking
[NASA-CASE-NPO-11921-1] c32 N74-30523

LINDSEY, W. F.
Stereo photomicrography system
[NASA-CASE-LAR-10176-1] c14 N72-20380

LINEBACK, L. D.
Thermal shock resistant hafnia ceramic material
[NASA-CASE-LAR-10894-1] c18 N73-14584

LINFORD, R. M. F.
Flame detector operable in presence of proton
radiation
[NASA-CASE-MFS-21577-1] c19 N74-29410

LING, S. C.
Flux sensing device using a tubular core with
toroidal gating coil and solenoidal output
coil wound thereon Patent
[NASA-CASE-XGS-01881] c09 N70-40123

LINGLE, J. T.
Frequency control network for a current feedback
oscillator Patent
[NASA-CASE-GSC-10041-1] c10 N71-19418

Static inverter Patent
[NASA-CASE-XGS-05289] c09 N71-19470

LIPANOVICH, M. I.
Medical subject monitoring systems
[NASA-CASE-MSC-14180-1] c52 N76-14757

LIPKE, D. W.
Doppler frequency spread correction device for
multiplex transmissions
[NASA-CASE-XGS-02749] c07 N69-39978

LIPKIS, R. B.
Electromagnetic radiation energy arrangement
[NASA-CASE-WOO-00428-1] c32 N79-19186

LIPONA, P. C.
Television signal scan rate conversion system
Patent
[NASA-CASE-XMS-07168] c07 N71-11300

Burst synchronization detection system Patent
[NASA-CASE-XMS-05605-1] c10 N71-19468

Data storage, image tube type
[NASA-CASE-MSC-14053-1] c60 N74-12888

System for producing chroma signals
[NASA-CASE-MSC-14683-1] c74 N77-18893

LIPPITT, M. W., JR.
Electrode for biological recording
[NASA-CASE-XMS-02872] c05 N69-21925

Instrument for use in performing a controlled
Valsalva maneuver Patent
[NASA-CASE-XMS-01615] c05 N70-41329

LIPSHITZ, A.
Modified face seal for positive film stiffness
[NASA-CASE-LEW-12989-1] c37 N80-12414

LISAGOR, W. B.
Controlled glass bead peening Patent
[NASA-CASE-XLA-07390] c15 N71-18616

Fixture for environmental exposure of structural
materials under compression
[NASA-CASE-LAR-12602-1] c35 N81-19429

LISLE, R. V.
Lighting current measuring systems
[NASA-CASE-KSC-10807-1] c33 N75-26246

Automatic flowmeter calibration system
[NASA-CASE-KSC-11076-1] c34 N81-26402

LISOVICZ, E. J.
High contrast cathode ray tube
[NASA-CASE-ERC-10468] c09 N72-20206

LIST, W. F.
Solid state television camera system Patent
[NASA-CASE-XMF-06092] c07 N71-24612

Phototransistor imaging system
[NASA-CASE-MFS-20809] c23 N73-13660

LISTER, J. L.
Thermally conductive polymers
[NASA-CASE-GSC-11304-1] c06 N72-21105

LITANT, I.
Apparatus and method for separating a
semiconductor wafer Patent
[NASA-CASE-ERC-10138] c26 N71-14354

Method for detecting leaks in hermetically
sealed containers Patent
[NASA-CASE-ERC-10045] c15 N71-24910

LITCHFORD, G. B.
Altitude measuring system
[NASA-CASE-ERC-10412-1] c09 N73-12211

LITTLE, R. E.
Method of making pressure tight seal for super
alloy
[NASA-CASE-LAR-10170-1] c37 N74-11301

LITTLEJOHN, D. P.
High power-high voltage waterload Patent
[NASA-CASE-XNP-05381] c09 N71-20842

LIU, C. C.
Method and device for the detection of phenol
and related compounds
[NASA-CASE-LEW-12513-1] c25 N79-22235

LIU, F. F.
Respiratory analysis system and method
[NASA-CASE-MSC-13436-1] c05 N73-32015

LIVERMORE, S. F.
Lightning current detector
[NASA-CASE-KSC-11057-1] c33 N79-14305

LLOYD, W. B.
Bearing and gimbal lock mechanism and spiral
flex lead module Patent
[NASA-CASE-GSC-10556-1] c31 N71-26537

LOCH, F. J.
Frequency modulation demodulator threshold
extension device Patent
[NASA-CASE-MSC-12165-1] c07 N71-33696

LOCKARD, M. L.
Leak detector Patent
[NASA-CASE-LAR-10323-1] c12 N71-17573

LOCKMAN, C. S.
Method and apparatus for nondestructive testing
of pressure vessels
[NASA-CASE-NPO-12142-1] c38 N76-28563

LOCKWOOD, V. E.
Landing arrangement for aerial vehicles Patent
[NASA-CASE-XLA-00142] c02 N70-33286

Landing arrangement for aerial vehicle Patent
[NASA-CASE-XLA-00806] c02 N70-34858

Landing arrangement for aerospace vehicle Patent
[NASA-CASE-XLA-00805] c31 N70-38010

LOFTIN, L. E., JR.
Wind tunnel airstream oscillating apparatus Patent
[NASA-CASE-XLA-00112] c11 N70-33287

LOGAN, W. E.
Method of preparing zinc orthotitanate pigment
[NASA-CASE-MFS-23345-1] c27 N77-30237

LOH, G. M.
Medical subject monitoring systems
[NASA-CASE-MSC-14180-1] c52 N76-14757

LOHR, J. J.
Variable stiffness polymeric damper
[NASA-CASE-XAC-11225] c14 N69-27486

LOKEBSON, D. C.
Voltage to frequency converter Patent
[NASA-CASE-GSC-10022-1] c10 N71-25882

X-Y alphanumeric character generator for
oscilloscopes
[NASA-CASE-GSC-11582-1] c33 N75-19517

Speech analyzer
[NASA-CASE-GSC-11898-1] c32 N77-30309

LOMBARDI, F.
Hermetic seal for a shaft
[NASA-CASE-NPO-15115-1] c37 N80-25660

Head for high speed spinner having a vacuum chuck
[NASA-CASE-NFO-15227-1] c37 N81-33482

LONBERG, J. O.
Attitude control for spacecraft Patent
[NASA-CASE-XNP-02982] c31 N70-41855

LONG, E. R., JR.
Thermoluminescent aerosol analysis
[NASA-CASE-LAR-12046-1] c25 N78-15210

LONG, H. R.
Precipitation detector Patent
[NASA-CASE-XLA-02619] c10 N71-26334

LONG, W. C.
Technique for extending the frequency range of
digital dividers
[NASA-CASE-LAR-10730-1] c33 N74-10223

Non-destructive method for applying and removing
instrumentation on helicopter rotor blades
[NASA-CASE-LAR-11201-1] c35 N78-24515

LONGYEAR, W. D.
Omnidirectional acceleration device Patent
[NASA-CASE-BQN-10780] c14 N71-30265

LOOK, G. F.
Foam generator Patent
[NASA-CASE-XLA-00838] c03 N70-36778

LOOP, R. W.
Absolute focus lock for microscopes
[NASA-CASE-LAR-10184] c14 N72-22445

LOOSE, J. D.
Steady state thermal radiometers
[NASA-CASE-MFS-21108-1] c34 N74-27861

LOPEZ, A. E.
Three-axis finger tip controller for switches
Patent
[NASA-CASE-XAC-02405] c09 N71-16089

LORD, H. C., III
Analysis of hydrogen-deuterium mixtures
[NASA-CASE-NPO-11322] c06 N72-25146

LORELL, R. E.
High temperature lens construction Patent
[NASA-CASE-XNP-04111] c14 N71-15622

All sky pointing attitude control system
[NASA-CASE-ARC-10716-1] c35 N77-20399

LOTHSCHUETZ, P. X.
Stretchers Patent
[NASA-CASE-XMP-06589] c05 N71-23159

LOTT, D. E.
Method of fabricating a photovoltaic module of a
substantially transparent construction
[NASA-CASE-NPO-14303-1] c44 N80-18550

LOUGHEAD, A. G.
Linear differential pressure sensor Patent
[NASA-CASE-XNP-01974] c14 N71-22752

LOUGHHEAD, T. E.
Satellite retrieval system
[NASA-CASE-MPS-25403-1] c18 N81-24164

LOUNSBERRY, E. D.
Jet shoes
[NASA-CASE-XLA-08491] c05 N69-21380

LOVALL, D. D.
Electric field measuring and display system
[NASA-CASE-KSC-10731-1] c33 N74-27862

LOVELL, J. S.
Portable breathing system
[NASA-CASE-MSC-16182-1] c54 N80-10799

LOVELL, E. B.
Process for preparing liquid metal electrical contact device
[NASA-CASE-LEW-11978-1] c33 N77-26385
Liquid metal slip ring
[NASA-CASE-LEW-12277-2] c33 N78-25323

LOVELLOCK, J. E.
Atmospheric sampling devices
[NASA-CASE-NPO-11373] c13 N72-25323

LOVINGER, D. E.
Voice operated controller Patent
[NASA-CASE-XLA-04063] c31 N71-33160

LOWE, E. G.
Continuous turning slip ring assembly Patent
[NASA-CASE-XMF-01049] c15 N71-23049

LOWEN, I. B.
Spacecraft attitude detection system by stellar reference Patent
[NASA-CASE-XGS-03431] c21 N71-15642
Roll alignment detector
[NASA-CASE-GSC-10514-1] c14 N72-20379

LOWERY, J. R.
Panel for selectively absorbing solar thermal energy and the method of producing said panel
[NASA-CASE-MPS-22562-1] c44 N76-14595

LOWRY, J. G.
Jet aircraft configuration Patent
[NASA-CASE-XLA-00087] c02 N70-33332
Variable-span aircraft Patent
[NASA-CASE-XLA-00166] c02 N70-34178

LOY, C. A.
Tank construction for space vehicles Patent
[NASA-CASE-XMF-01899] c31 N70-41948

LOYD, C.
System for maintaining a motor at a predetermined speed utilizing digital feedback means Patent
[NASA-CASE-XMF-06892] c09 N71-24805
RC rate generator for slow speed measurement Patent
[NASA-CASE-XMF-02966] c10 N71-24863

LUBOWITZ, E. E.
Ablative resin Patent
[NASA-CASE-XLE-05913] c33 N71-14032
Reinforced structural plastics
[NASA-CASE-LEW-10199-1] c27 N74-23125

LUCAS, C. E.
Analog to digital converter
[NASA-CASE-NPO-13385-1] c33 N76-18345

LUCERO, D. P.
Method for detecting hydrogen gas
[NASA-CASE-XMF-03873] c06 N69-39733

LUCHT, R. A.
A technique for breaking ice in the path of a ship
[NASA-CASE-LAR-10815-1] c16 N72-22520

LUCY, E. E.
Molded composite pyrogen igniter for rocket motors
[NASA-CASE-LAR-12018-1] c20 N78-24275

LUDWIG, A. C.
Dual waveguide mode source having control means for adjusting the relative amplitude of two modes Patent
[NASA-CASE-XNP-03134] c07 N71-10676
Singly-curved reflector for use in high-gain antennas
[NASA-CASE-NPO-11361] c07 N72-32169
Dual frequency microwave reflex feed
[NASA-CASE-NPO-13091-1] c09 N73-12214
Low loss dichroic plate
[NASA-CASE-NPO-13171-1] c32 N74-11000

LUDWIG, L. P.
Pill seal
[NASA-CASE-XLE-05130] c15 N69-21362
Pill seal Patent
[NASA-CASE-XLE-05130-2] c15 N71-19570
Spiral groove seal
[NASA-CASE-XLE-10326-2] c15 N72-29488

Spiral groove seal
[NASA-CASE-LEW-10326-3] c37 N74-10474
Spiral groove seal
[NASA-CASE-XLE-10326-4] c37 N74-15125
High speed, self-acting shaft seal
[NASA-CASE-LEW-11274-1] c37 N75-21631
Fluid seal for rotating shafts
[NASA-CASE-LEW-11676-1] c37 N76-22541
Counter pumping debris excluder and separator
[NASA-CASE-LEW-11855-1] c07 N78-25090
Composite seal for turbomachinery
[NASA-CASE-LEW-12131-1] c37 N79-18318
Shaft seal assembly for high speed and high pressure applications
[NASA-CASE-LEW-11873-1] c37 N79-22475
Composite seal for turbomachinery
[NASA-CASE-LEW-12131-2] c37 N80-26658
Circumferential shaft seal
[NASA-CASE-LEW-12119-1] c37 N80-28711
Multiple plate hydrostatic viscous damper
[NASA-CASE-LEW-12445-1] c37 N81-22360
Circumferential shaft seal
[NASA-CASE-LEW-12119-2] c37 N81-26447

LUERBERS, S. S.
Thermionic tantalum emitter doped with oxygen Patent Application
[NASA-CASE-NPO-11138] c03 N70-34646
Thermionic diode switch Patent
[NASA-CASE-NPO-10404] c03 N71-12255

LUERBERG, G. W.
Blade retainer assembly
[NASA-CASE-LEW-12608-1] c07 N77-27116

LUM, H.
Sampling video compression system
[NASA-CASE-ARC-10984-1] c32 N77-24328

LUNCE, R. S.
Medical subject monitoring systems
[NASA-CASE-MSC-14180-1] c52 N76-14757

LUND, G. F.
Pocket ECG electrode
[NASA-CASE-ARC-11258-1] c52 N80-33081
Subcutaneous electrode structure
[NASA-CASE-ARC-11117-1] c52 N81-14612

LUND, W. C.
Heated porous plug microthruster
[NASA-CASE-GSC-10640-1] c28 N72-18766

LUNDQUIST, J. R.
Preparation of high purity copper fluoride
[NASA-CASE-LEW-10794-1] c06 N72-17093

LUSHBAUGH, W. A.
Data compression system
[NASA-CASE-XNP-09785] c08 N69-21928
Data compressor Patent
[NASA-CASE-XNP-04067] c08 N71-22707
Error correcting method and apparatus Patent
[NASA-CASE-XNP-02748] c08 N71-22749
Comparator for the comparison of two binary numbers Patent
[NASA-CASE-XNP-04819] c08 N71-23295
Parallel generation of the check bits of a PN sequence Patent
[NASA-CASE-XNP-04623] c10 N71-26103
Versatile arithmetic unit for high speed sequential decoder
[NASA-CASE-NFO-11371] c08 N73-12177

LUTES, G. F.
A fiber optic transmission line stabilization apparatus and method
[NASA-CASE-NPO-15036-1] c74 N80-34250
Precise RF timing signal distribution to remote stations
[NASA-CASE-NPO-14749-1] c32 N81-14186

LUTES, G. F., JR.
Broadband stable power multiplier Patent
[NASA-CASE-XNP-10854] c10 N71-26331
Cascaded complementary pair broadband transistor amplifiers Patent
[NASA-CASE-NPO-10003] c10 N71-26415
Low phase noise digital frequency divider
[NASA-CASE-NPO-11569] c10 N73-26229

LUTNACK, E.
A method for producing a solidified body of silicon
[NASA-CASE-NPO-15250-1] c25 N81-16174

LUTZ, E. B.
Operational integrator Patent
[NASA-CASE-NPO-10230] c09 N71-12520

LYLAND, J. W.
Versatile arithmetic unit for high speed

sequential decoder
[NASA-CASE-NPO-11371] c08 N73-12177

LYNCH, E. J.
Three-axis adjustable loading structure
[NASA-CASE-FRC-10051-1] c35 N74-13129

LYNCH, T. L.
Pulsed excitation voltage circuit for transducers
[NASA-CASE-FRC-10036] c09 N72-22200

LYON, W. E.
Optical range finder having nonoverlapping
complete images
[NASA-CASE-MSC-12105-1] c14 N72-21409

M

MA, L. E.
Digital numerically controlled oscillator
[NASA-CASE-MSC-16747-1] c33 N81-17349

MACCONHILL, J. E.
Ultra stable frequency distribution system
[NASA-CASE-NPO-13836-1] c32 N78-15323

MACCONOCHIE, I. O.
Excessive temperature warning system Patent
[NASA-CASE-XLA-01926] c14 N71-15620

Miniature spectrally selective dosimeter
[NASA-CASE-LAR-12469-1] c35 N81-12388

MACDAVID, K. S.
Thermocouple installation
[NASA-CASE-NPO-13540-1] c35 N77-14409

MACDONALD, P. F.
System for real-time crustal deformation
monitoring
[NASA-CASE-NPO-14124-1] c46 N80-14603

Interferometric locating system
[NASA-CASE-NPO-14173-1] c04 N80-32359

MACFADDEN, J. A.
Rotating mandrel for assembly of inflatable
devices Patent
[NASA-CASE-XLA-04143] c15 N71-17687

MACGLASHAN, W. F.
Power control for hot gas engines
[NASA-CASE-NPO-14220-1] c37 N81-14318

MACGLASHAN, W. F., JR.
Belleville spring assembly with elastic guides
[NASA-CASE-XNP-05452] c15 N69-27504

High pressure four-way valve Patent
[NASA-CASE-XNP-00214] c15 N70-36908

Multiple Belleville spring assembly Patent
[NASA-CASE-XNP-00840] c15 N70-38225

Pressure regulating system Patent
[NASA-CASE-XNP-00450] c15 N70-36603

Ejection unit Patent
[NASA-CASE-XNP-00676] c15 N70-38996

Reinforcing means for diaphragms Patent
[NASA-CASE-XNP-01962] c32 N70-41370

High pressure filter Patent
[NASA-CASE-XNP-00732] c28 N70-41447

Antiflutter ball check valve Patent
[NASA-CASE-XNP-01152] c15 N70-41811

High pressure regulator valve Patent
[NASA-CASE-XNP-00710] c15 N71-10778

Filler valve Patent
[NASA-CASE-XNP-01747] c15 N71-23024

MACKAY, C. A.
Quick disconnect latch and handle combination
Patent
[NASA-CASE-MFS-11132] c15 N71-17649

MACLEOD, W. E.
Bacterial contamination monitor
[NASA-CASE-GSC-10879-1] c14 N72-25413

MACVRIE, G. E.
Analog spatial maneuver computer
[NASA-CASE-GSC-10880-1] c08 N72-11172

MADDIX, J. E.
Air bearing
[NASA-CASE-WLP-10002] c15 N72-17451

MADRY, J. E.
Satellite appendage tie down cord Patent
[NASA-CASE-XGS-02554] c31 N71-21064

Redundant actuating mechanism Patent
[NASA-CASE-XGS-08718] c15 N71-24600

Rotary electric device
[NASA-CASE-GSC-12138-1] c33 N79-20314

MADISON, I. B.
Aerodynamic spike nozzle Patent
[NASA-CASE-XGS-01143] c31 N71-15647

MADSEN, B.
Apparatus and method for skin packaging articles
[NASA-CASE-MFS-20855] c15 N73-27405

MAHAN, J. C.
Device for preventing high voltage arcing in
electron beam welding Patent
[NASA-CASE-IMP-08522] c15 N71-19486

MAIDEN, D. L.
Flow velocity and directional instrument
[NASA-CASE-LAR-10855-1] c14 N73-13415

Two dimensional wedge/translating shroud nozzle
[NASA-CASE-LAR-11919-1] c07 N78-27121

MAILLOUX, R. J.
Array phasing device Patent
[NASA-CASE-ERC-10046] c10 N71-18722

Circularly polarized antenna
[NASA-CASE-ERC-10214] c09 N72-31235

Phase control circuits using frequency
multiplications for phased array antennas
[NASA-CASE-ERC-10285] c10 N73-16206

MAJOR, C. J.
Mixture separation cell Patent
[NASA-CASE-XMS-02952] c18 N71-20742

MALLING, L. E.
Digital television camera control system Patent
[NASA-CASE-XNP-01472] c14 N70-41807

Reduced bandwidth video communication system
utilizing sampling techniques Patent
[NASA-CASE-XNP-02791] c07 N71-23026

MALEBERG, J. E.
Waveform simulator Patent
[NASA-CASE-NPO-10251] c10 N71-27365

MALONE, L. B.
Emergency lunar communications system
[NASA-CASE-MFS-21042] c07 N72-25171

MANATT, S. L.
Audio frequency marker system
[NASA-CASE-NPO-11147] c14 N72-27408

MANDEL, C. E.
Azimuth laying system Patent
[NASA-CASE-XNP-01669] c21 N71-23289

MANDELKORN, J.
Method of making a silicon semiconductor device
Patent
[NASA-CASE-XLE-02792] c26 N71-10607

Method of making electrical contact on silicon
solar cell and resultant product Patent
[NASA-CASE-XLE-04787] c03 N71-20492

Gd or Sm doped silicon semiconductor composition
Patent
[NASA-CASE-XLE-10715] c26 N71-23292

Silicon solar cell with cover glass bonded to
cell by metal pattern Patent
[NASA-CASE-XLE-08569] c03 N71-23449

Semiconductor material and method of making same
Patent
[NASA-CASE-XLE-02798] c26 N71-23654

Method of attaching a cover glass to a silicon
solar cell Patent
[NASA-CASE-XLE-08569-2] c03 N71-24681

MANDELL, A.
Condition sensor system and method
[NASA-CASE-MSC-14805-1] c54 N78-32720

MANGION, C.
System for preconditioning a combustible vapor
[NASA-CASE-NPO-12072] c28 N72-22772

MANGOLD, D. W.
Medical subject monitoring systems
[NASA-CASE-MSC-14180-1] c52 N76-14757

MANH, C. E.
Rotary target V-block
[NASA-CASE-LAR-12007-2] c74 N79-25876

MANH, W. A.
Compact artificial hand
[NASA-CASE-NPO-13906-1] c54 N79-24652

MANHING, C. E.
Thermal shock and erosion resistant tantalum
carbide ceramic material
[NASA-CASE-LAR-11902-1] c27 N78-17206

MANHING, C. E., JR.
Controlled glass bead peening Patent
[NASA-CASE-XLA-07390] c15 N71-18616

Thermal shock resistant hafnia ceramic material
[NASA-CASE-LAR-10894-1] c18 N73-14584

MANOLI, R.
Aircraft-mounted crash-activated transmitter
device
[NASA-CASE-MFS-16609-3] c03 N76-32140

MANSOUR, E. M.
Servo-controlled intravital microscope system
[NASA-CASE-NPO-13214-1] c35 N75-25123

MANTLER, R. L.
Rocket propellant injector Patent
[NASA-CASE-XLE-00103] c28 N70-33241

MANUS, B. A.
Active microwave irises and windows
[NASA-CASE-LAR-10513-1] c07 N72-25170
Thin film microwave iris
[NASA-CASE-LAR-10511-1] c09 N72-29172
Logarithmic circuit with wide dynamic range
[NASA-CASE-GSC-12145-1] c33 N78-32339

MANZO, H. A.
Cross-linked polyvinyl alcohol and method of making same
[NASA-CASE-LEW-13504-1] c27 N81-27279
Polyvinyl alcohol battery separator containing inert filler
[NASA-CASE-LEW-13556-1] c44 N81-27615

MARLE, W. H.
Analytical test apparatus and method for determining oxide content of alkali metal Patent
[NASA-CASE-XLE-01997] c06 N71-23527

MARPLES, H. E.
Light intensity modulator controller Patent
[NASA-CASE-XMS-04300] c09 N71-19479

MARAK, R. J.
Life raft stabilizer
[NASA-CASE-MSC-12393-1] c02 N73-26006

MARCELL, G. V.
Method and apparatus for preparing multiconductor cable with flat conductors
[NASA-CASE-MPS-10946-1] c31 N79-21226
Edge coating of flat wires
[NASA-CASE-XMP-05757-1] c31 N79-21227

MARCUM, D. C., JR.
Hypersonic airbreathing missile
[NASA-CASE-LAR-12264-1] c15 N78-32168

MARCUS, B. D.
Flat-plate heat pipe
[NASA-CASE-GSC-11998-1] c34 N77-32413

MARCUS, H. L.
Laser extensometer
[NASA-CASE-MPS-19259-1] c36 N78-14380

MAREK, C. J.
Fuel combustor
[NASA-CASE-LEW-12137-1] c25 N78-10224
Supercritical fuel injection system
[NASA-CASE-LEW-12990-1] c07 N81-29129

MARGOLIS, J. S.
Method and apparatus for Doppler frequency modulation of radiation
[NASA-CASE-NPO-14524-1] c32 N80-24510
Coherently pulsed laser source
[NASA-CASE-NPO-15111-1] c36 N80-24602
Stark cell optoacoustic detection of constituent gases in sample
[NASA-CASE-NPO-14143-1] c25 N81-14015

MARGOSIAN, P. H.
Electrostatic thruster with improved insulators Patent
[NASA-CASE-XLE-01902] c28 N71-10574
Single grid accelerator for an ion thruster
[NASA-CASE-XLE-10453-2] c28 N73-27699

MARGRAF, H. J.
High pressure four-way valve Patent
[NASA-CASE-XNP-00214] c15 N70-36908

MARLEY, R. A.
Self-adjusting multisegment, deployable, natural circulation radiator Patent
[NASA-CASE-XHQ-03673] c33 N71-29046

MARLOW, H. O.
Method of making a cermet Patent
[NASA-CASE-LEW-10219-1] c18 N71-28729

MARLOW, R. E.
System for enhancing tool-exchange capabilities of a portable wrench
[NASA-CASE-MPS-22283-1] c37 N75-33395
Remotely operable articulated manipulator
[NASA-CASE-MPS-22707-1] c37 N76-15457

MAROPIS, N.
Methods and apparatus employing vibratory energy for wrenching Patent
[NASA-CASE-MPS-20586] c15 N71-17686

MARRKLE, E. A.
Process for preparation of dianilinosilanes Patent
[NASA-CASE-XMP-06409] c06 N71-23230

MARROW, E. A., JR.
Pressure garment joint Patent
[NASA-CASE-XMS-09636] c05 N71-12344

Omnidirectional joint Patent
[NASA-CASE-XMS-09635] c05 N71-24623

Foreshortened convolute section for a pressurized suit Patent
[NASA-CASE-XMS-09637-1] c05 N71-24730

Method of forming a root cord restrained convolute section
[NASA-CASE-MSC-12398] c05 N72-20098

Restraint torso for a pressurized suit
[NASA-CASE-MSC-12397-1] c05 N72-25119

MARSH, H. E., JR.
Trifunctional alcohol
[NASA-CASE-NPO-10714] c06 N69-31244
Novel polycarboxylic prepolymeric materials and polymers thereof Patent
[NASA-CASE-NPO-10596] c06 N71-25929
Aldehyde-containing urea-absorbing polysaccharides
[NASA-CASE-NPO-13620-1] c27 N77-30236
Oil and fat absorbing polymers
[NASA-CASE-NPO-11609-2] c27 N77-31308
Solid propellant motor
[NASA-CASE-NPO-11458A] c20 N78-32179

MARSH, H. W.
Fluid pressure balanced seal
[NASA-CASE-XGS-01286-1] c37 N79-33469

MARSHALL, J. H.
Baseline stabilization system for ionization detector Patent
[NASA-CASE-XNP-03128] c10 N70-41991

MARSHALL, T. H., JR.
Nuclear mass flowmeter
[NASA-CASE-MPS-20485] c14 N72-11365

MARSIK, S. J.
Selective nickel deposition
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Production of pure metals
[NASA-CASE-LEW-10906-1] c25 N74-30502
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[NASA-CASE-LEW-11860-1] c37 N76-18458

MARTEL, R. J.
Amplitude steered array
[NASA-CASE-GSC-11446-1] c33 N74-20860

MARTIN, J. A.
Orbiter/launch system
[NASA-CASE-LAR-12250-1] c14 N81-26161

MARTIN, J. W.
Dynamic Doppler simulator Patent
[NASA-CASE-XMS-05454-1] c07 N71-12391

MARTIN, H. C.
Segmented back-up bar Patent
[NASA-CASE-XMP-00640] c15 N70-39924
Portable alignment tool Patent
[NASA-CASE-XMP-01452] c15 N70-41371

MARTIN, R. B.
Color perception tester
[NASA-CASE-KSC-10278] c05 N72-16015

MARTIN, S. C.
Correlation type phase detector
[NASA-CASE-GSC-11744-1] c33 N75-26243

MARTIN, W. L.
Phase-locked loop with sideband rejecting properties Patent
[NASA-CASE-XNP-02723] c07 N70-41680
Method of resolving clock synchronization error and means therefor Patent
[NASA-CASE-XNP-08875] c10 N71-23099
Communications link for computers
[NASA-CASE-NPO-11161] c08 N72-25207
Binary coded sequential acquisition ranging system
[NASA-CASE-NPO-11194] c08 N72-25209
Digital video display system using cathode ray tube
[NASA-CASE-NPO-11342] c09 N72-25248
Digital demodulator-correlator
[NASA-CASE-NPO-13982-1] c32 N79-14267

MARTINAGE, L. H.
Power supply Patent
[NASA-CASE-XMS-02159] c10 N71-22961

MARTINECK, H. G.
Electrical connector for flat cables Patent
[NASA-CASE-XMP-00324] c09 N70-34596
Printed cable connector Patent
[NASA-CASE-XMP-00369] c09 N70-36494
Method of making a molded connector
[NASA-CASE-XMP-03498] c15 N71-15986
Electrical connector
[NASA-CASE-MPS-20757] c09 N72-28225

MARTUCCI, V. J.
Tuning arrangement for an electron discharge

device or the like Patent
[NASA-CASE-XNP-09771] c09 N71-24841

MARTZ, E. L.
Externally pressurized fluid bearing Patent
[NASA-CASE-XNP-00515] c15 N70-34664

MARVIN, I. E.
Integrated control system for a gas turbine engine
[NASA-CASE-LEW-12594-2] c07 N81-19116

MARZEE, R. A.
Tool for use in lifting pin supported objects
[NASA-CASE-NPO-13157-1] c37 N74-32918

MASCV, A. C.
Deep space monitor communication satellite
system Patent
[NASA-CASE-XAC-06029-1] c31 N71-24813

MASEK, T. D.
Electron bombardment ion engine Patent
[NASA-CASE-XNP-04124] c28 N71-21822

Feed system for an ion thruster
[NASA-CASE-NPO-10737] c28 N72-11709

MASEJIAN, J.
Temperature sensitive capacitor device
[NASA-CASE-XNP-09750] c14 N69-39937

Thin film capacitive bolometer and temperature
sensor Patent
[NASA-CASE-NPO-10607] c09 N71-27232

Thin film temperature sensor and method of
making same
[NASA-CASE-NPO-11775] c26 N72-28761

Use of thin film light detector
[NASA-CASE-NPO-11432-2] c35 N74-15090

Deep trap, laser activated image converting system
[NASA-CASE-NPO-13131-1] c36 N75-19652

Stored charge transistor
[NASA-CASE-NPO-11156-2] c33 N75-31331

Method and apparatus for measurement of trap
density and energy distribution in dielectric
films
[NASA-CASE-NPO-13443-1] c76 N76-26994

Chemical vapor deposition reactor
[NASA-CASE-NPO-13650-1] c25 N79-28253

Induced junction solar cell and method of
fabrication
[NASA-CASE-NPO-13786-1] c44 N80-29835

MASLOWSKI, E. A.
Method of making an insulation foil
[NASA-CASE-LEW-11484-1] c24 N75-33181

MASON, J. W.
Microcomputerized electric field meter
diagnostic and calibration system
[NASA-CASE-KSC-11035-1] c35 N76-28411

MASON, R. J.
Collapsible reflector Patent
[NASA-CASE-XMS-03454] c09 N71-20658

MASON, R. B.
Radial module space station Patent
[NASA-CASE-XMS-01906] c31 N70-41373

MASSUCCO, A. A.
Non-flammable elastomeric fiber from a
fluorinated elastomer and containing an
halogenated flame retardant
[NASA-CASE-MSC-14331-1] c27 N76-24405

Flame retardant spandex type polyurethanes
[NASA-CASE-MSC-14331-2] c27 N78-17213

Process for spinning flame retardant elastomeric
compositions
[NASA-CASE-MSC-14331-3] c27 N78-32262

MATTEE, G. C.
Flow separation detector
[NASA-CASE-ARC-11046-1] c35 N78-14364

MATHUR, P. P.
Program for computer aided reliability estimation
[NASA-CASE-NPO-13086-1] c15 N73-12495

MATSUHITO, D. S.
Shoulder harness and lap belt restraint system
[NASA-CASE-ARC-10519-2] c05 N75-25915

MATSUMOTO, Y.
Sampling video compression system
[NASA-CASE-ARC-10984-1] c32 N77-24328

MATTAUCH, R. J.
Infrared detectors
[NASA-CASE-LAR-10728-1] c14 N73-12445

MATTHEWS, P. R., JR.
Lightweight, variable solidity knitted parachute
fabric
[NASA-CASE-LAR-10776-1] c02 N74-10034

MATZEL, R. J.
Apparatus for measuring semiconductor device
resistance

[NASA-CASE-NPO-14424-1] c33 N80-32650

MAULDIN, D. G.
Contourograph system for monitoring
electrocardiograms
[NASA-CASE-MSC-13407-1] c10 N72-20225

MAXWELL, H. G.
Method of adhering bone to a rigid substrate
using a graphite fiber reinforced bone cement
[NASA-CASE-NPO-13764-1] c27 N78-17215

MAXWELL, H. S.
Spacecraft attitude detection system by stellar
reference Patent
[NASA-CASE-XGS-03431] c21 N71-15642

Programmable telemetry system Patent
[NASA-CASE-GSC-10131-1] c07 N71-24624

Plural beam antenna
[NASA-CASE-GSC-11013-1] c09 N73-19234

MAXWELL, H. W.
Helical coaxial resonator RF filter
[NASA-CASE-XGS-02816] c07 N69-24323

MAXWELL, R. F., JR.
Electronic background suppression method and
apparatus for a field scanning sensor
[NASA-CASE-XGS-05211] c07 N69-39980

MAXWELL, W. A.
Process of casting heavy slips Patent
[NASA-CASE-XLE-00106] c15 N71-16076

MAY, C. E.
Selective nickel deposition
[NASA-CASE-LEW-10965-1] c15 N72-25452

Production of pure metals
[NASA-CASE-LEW-10906-1] c25 N74-30502

Process for making anhydrous metal halides
[NASA-CASE-LEW-11860-1] c37 N76-18458

Method of cross-linking polyvinyl alcohol and
other water soluble resins
[NASA-CASE-LEW-13103-1] c27 N80-32516

MAYALL, S. D.
Frictionless universal joint Patent
[NASA-CASE-NPO-10646] c15 N71-28467

MAYER, L. A.
Chelate-modified polymers for atmospheric gas
chromatography
[NASA-CASE-ARC-11154-1] c25 N80-23383

MAYNARD, O. E.
Radial module space station Patent
[NASA-CASE-XMS-01906] c31 N70-41373

MAYNE, E. C.
Shock absorbing mount for electrical components
[NASA-CASE-NPO-13253-1] c37 N75-18573

MAYO, E. E.
Hypersonic reentry vehicle Patent
[NASA-CASE-XMS-04142] c31 N70-41631

MAYO, J. W.
Connector - Electrical
[NASA-CASE-XLA-01288] c09 N69-21470

Tubular coupling having frangible connecting means
[NASA-CASE-XLA-02854] c15 N69-27490

Missile stage separation indicator and stage
initiator Patent
[NASA-CASE-XLA-00791] c03 N70-39930

Detector panels-micrometeoroid impact Patent
[NASA-CASE-XLA-05906] c31 N71-16221

MAYO, R. F.
Electric-arc heater Patent
[NASA-CASE-XLA-00330] c33 N70-34540

MAZARIS, G. A.
Application of semiconductor diffusants to solar
cells by screen printing
[NASA-CASE-LEW-12775-1] c44 N79-11468

MAZER, I.
Analog-to-digital conversion system Patent
[NASA-CASE-XAC-00404] c08 N70-40125

MAZIQUE, J.
A cervix-to-rectum measuring device in a
radiation applicator for use in the treatment
of cervical cancer
[NASA-CASE-GSC-12081-2] c52 N77-26796

MAZUR, J. T.
Telescoping columns
[NASA-CASE-LAR-12195-1] c31 N81-27324

MCAPPEE, D. F.
Bi-polar phase detector and corrector for split
phase PCM data signals Patent
[NASA-CASE-XGS-01590] c07 N71-12392

Radio frequency coaxial high pass filter Patent
[NASA-CASE-XGS-01418] c09 N71-23573

MCALIXANDER, B. T.
Laser head for simultaneous optical pumping of

several dye lasers
[NASA-CASE-LAR-11341-1] c36 N75-15655

MCBRAYER, B. O.
Soft frame adjustable eyeglasses Patent
[NASA-CASE-XMS-06064] c05 N71-23096

MCBRYAR
Ion-exchange membrane with platinum electrode
assembly Patent
[NASA-CASE-XMS-02063] c03 N71-29044

MCBRYAR, B.
Reconstituted asbestos matrix
[NASA-CASE-MSC-12568-1] c24 N76-14204

MCCAIG, J. C.
Electric arc welding Patent
[NASA-CASE-XMP-00392] c15 N70-34814

MCCALLUM, J.
Porous electrode comprising a bonded stack of
pieces of corrugated metal foil
[NASA-CASE-GSC-11368-1] c09 N73-32108

MCCAMPBELL, W. B.
Electric arc welding Patent
[NASA-CASE-XMP-00392] c15 N70-34814

Weld control system using thermocouple wire Patent
[NASA-CASE-MFS-06074] c15 N71-20393

RC rate generator for slow speed measurement
Patent
[NASA-CASE-XMP-02966] c10 N71-24863

A dc motor speed control system Patent
[NASA-CASE-MFS-14610] c09 N71-28886

MCCANDLESS, L. C.
Method of making reinforced composite structure
[NASA-CASE-LEW-12619-1] c24 N77-15171

MCCANN, D. B.
Phototransistor
[NASA-CASE-MFS-20407] c09 N73-15235

Time delay and integration detectors using
charge transfer devices
[NASA-CASE-GSC-12324-1] c33 N81-33403

MCCANN, R. J.
Device for handling heavy loads
[NASA-CASE-XNP-04969] c11 N69-27466

MCCARTHY, D. B.
Automatic level control circuit
[NASA-CASE-KSC-11170-1] c33 N81-29347

MCCARTY, J. L.
Lunar penetrometer Patent
[NASA-CASE-XLA-00934] c14 N71-22765

MCCAUL, P. F.
Sidereal frequency generator Patent
[NASA-CASE-XGS-02610] c14 N71-23174

MCCHESENEY, J. F., JR.
High voltage distributor
[NASA-CASE-GSC-11849-1] c33 N76-16332

MCCHESENEY, J. B.
Modulator for tone and binary signals
[NASA-CASE-GSC-11743-1] c32 N75-24981

MCCLEESE, D. J.
Method and apparatus for Doppler frequency
modulation of radiation
[NASA-CASE-NPO-14524-1] c32 N80-24510

MCCLENNAN, J. O.
High speed shutter
[NASA-CASE-ARC-10516-1] c70 N74-21300

Photomultiplier circuit including means for
rapidly reducing the sensitivity thereof
[NASA-CASE-ARC-10593-1] c33 N74-27682

MCCLOONEY, W. B.
The 2 deg/90 deg laboratory scattering photometer
[NASA-CASE-GSC-12088-1] c74 N78-13874

MCCLONG, C. E.
Antenna grout replacement system
[NASA-CASE-NPO-15205-1] c37 N81-19457

MCCLORE, J. C.
Preparation of monotectic alloys having a
controlled microstructure by directional
solidification under dopant-induced interface
breakdown
[NASA-CASE-MFS-23816-1] c26 N80-23419

MCCLORE, S. B.
Method and apparatus for holding two separate
metal pieces together for welding
[NASA-CASE-GSC-12318-1] c37 N80-23651

MCCONAUGHEY, B. I.
Star scanner
[NASA-CASE-GSC-11569-1] c89 N74-30886

MCCONNELL, J. C.
Method of plating copper on aluminum Patent
[NASA-CASE-XLA-08966-1] c17 N71-25903

MCCORMACK, W.
Single action separation mechanism Patent
[NASA-CASE-XLA-00188] c15 N71-22874

MCCORMICK, C. T., JR.
Automatic signal range selector for metering
devices Patent
[NASA-CASE-XMS-06497] c14 N71-26244

MCCRAW, D. L.
Emergency escape system Patent
[NASA-CASE-MSC-12086-1] c05 N71-12345

MCCREA, P. E.
Indexing microwave switch Patent
[NASA-CASE-XNP-06507] c09 N71-23548

Support assembly for cryogenically coolable
low-noise choke waveguide
[NASA-CASE-NFO-14253-1] c32 N80-32605

MCCREARY, R. A.
Parallel motion suspension device Patent
[NASA-CASE-XNP-01567] c15 N70-41310

MCCREIGHT, L. B.
Electrophoretic sample insertion
[NASA-CASE-MFS-21395-1] c25 N74-26948

Apparatus for conducting flow electrophoresis in
the substantial absence of gravity
[NASA-CASE-MFS-21394-1] c34 N74-27744

MCCUSKER, T. J.
Foldable solar concentrator Patent
[NASA-CASE-XLA-04622] c03 N70-41580

MCDANIELS, D. L.
Reinforced metallic composites Patent
[NASA-CASE-XLE-02428] c17 N70-33288

Method of making fiber reinforced metallic
composites Patent
[NASA-CASE-XLE-00231] c17 N70-38198

Reinforced metallic composites Patent
[NASA-CASE-XLE-00228] c17 N70-38490

MCDARIS, B. A.
Emergency escape system Patent
[NASA-CASE-IKS-07814] c15 N71-27067

MCDONALD, L. S.
Specific wavelength colorimeter
[NASA-CASE-MSC-14081-1] c35 N74-27860

MCDONNOLD, D. K.
Synchronous counter Patent
[NASA-CASE-XGS-02440] c08 N71-19432

MCDONNITT, F. B.
Laser coolant and ultraviolet filter
[NASA-CASE-MFS-20180] c16 N72-12440

MCDONALD, G. E.
Nuclear fuel elements
[NASA-CASE-XLE-00209] c22 N73-32528

Selective coating for solar panels
[NASA-CASE-LEW-12159-1] c44 N78-19599

Method for depositing an oxide coating
[NASA-CASE-LEW-13131-1] c26 N81-24230

Method of forming oxide coatings
[NASA-CASE-LEW-13132-1] c44 N81-27616

MCDONALD, R. T.
Gas low pressure low flow rate metering system
Patent
[NASA-CASE-FRC-10022] c12 N71-26546

Respiration monitor
[NASA-CASE-FRC-10012] c14 N72-17329

MCDONALD, A. B.
Force-balanced, throttle valve Patent
[NASA-CASE-NPO-10808] c15 N71-27432

Quick disconnect coupling
[NASA-CASE-NPO-11202] c15 N72-25450

Rotary actuator
[NASA-CASE-NFO-10680] c31 N73-14855

Disconnect unit
[NASA-CASE-NPO-11330] c33 N73-26958

Zero torque gear head wrench
[NASA-CASE-NFO-13059-1] c37 N76-20480

Phase-angle controller for Stirling engines
[NASA-CASE-NPO-14388-1] c37 N81-17432

Hot gas engine with dual crankshafts
[NASA-CASE-NPO-14221-1] c37 N81-25370

MCCREAN, E. A.
Bonding method in the manufacture of continuous
regression rate sensor devices
[NASA-CASE-LAR-10337-1] c24 N75-30260

MCPADIN, L. B.
Platinum resistance thermometer circuit
[NASA-CASE-MSC-12327-1] c35 N77-27368

MCGANNON, W. J.
Ophthalmic method and apparatus
[NASA-CASE-LEW-11669-1] c05 N73-27062

Ophthalmic liquifaction pump
[NASA-CASE-LEW-12051-1] c52 N75-33640

Intra-ocular pressure normalization technique
and equipment
[NASA-CASE-LEW-12723-1] c52 N80-18690

MCGHEE, J. R.
Frangible tube energy dissipation Patent
[NASA-CASE-XLA-00754] c15 N70-34850

Omnidirectional multiple impact landing system
Patent
[NASA-CASE-XLA-09881] c31 N71-16085

MCGINNESS, H. D.
An improved suspension system for a wheel
rolling on a flat track
[NASA-CASE-NPO-14395-1] c37 N79-12446

MCGOUGH, J. T.
Emergency escape system Patent
[NASA-CASE-XKS-07814] c15 N71-27067

MCHAFFIE, D. J.
Extensible cable support Patent
[NASA-CASE-XMF-07587] c15 N71-18701

MCHATTON, A. D.
Canister closing device Patent
[NASA-CASE-XLA-01446] c15 N71-21528

Traveling sealer for contoured table Patent
[NASA-CASE-XLA-01494] c15 N71-24164

Amplifying ribbon extensometer
[NASA-CASE-LAR-11825-1] c35 N77-22449

Nozzle extraction process and handlemeter for
measuring handle
[NASA-CASE-LAR-12147-1] c31 N79-11246

MCHENNEY, T. P.
Miniature carbon dioxide sensor and methods
[NASA-CASE-MSC-13332-1] c14 N72-21408

MCHUGH, D. P.
Variable mixer propulsion cycle
[NASA-CASE-LEW-12917-1] c07 N78-18067

MCINTOSH, M. J.
Process for the leaching of AP from propellant
[NASA-CASE-NPO-14109-1] c28 N80-23471

MCKAY, R. A.
Combuster
[NASA-CASE-NPO-13958-1] c25 N79-11151

MCKEE, C. W.
Fluid control apparatus and method
[NASA-CASE-LAR-11110-1] c34 N75-26282

MCKENNA, J. P., JR.
Fault tolerant clock apparatus utilizing a
controlled minority of clock elements
[NASA-CASE-MSC-12531-1] c35 N75-30504

MCKENNA, E. T.
Automatic character skew and spacing checking
network
[NASA-CASE-GSC-11925-1] c33 N76-18353

MCKENZIE, B. L.
Diatomic infrared gasdynamic laser
[NASA-CASE-ARC-10370-1] c36 N75-31426

MCKEOWN, D.
Method for attaching a fused-quartz mirror to a
conductive metal substrate
[NASA-CASE-MFS-23405-1] c26 N77-29260

MCKEVITT, P. I.
Swirling flow nozzle Patent
[NASA-CASE-XNP-03692] c28 N71-24321

MCKINNEY, R. L.
Self-calibrating displacement transducer Patent
[NASA-CASE-XLA-00781] c09 N71-22999

MCKINNON, R. A.
External liquid-spray cooling of turbine blades
Patent
[NASA-CASE-XLE-00037] c28 N70-33372

MCLAIN, J. H.
Air bearing Patent
[NASA-CASE-XMF-01887] c15 N71-10617

MCLAUCHLAN, J. H.
Horizon sensor with a plurality of fixedly
positioned radiation compensated radiation
sensitive detectors Patent
[NASA-CASE-XNP-06957] c14 N71-21088

Light position locating system Patent
[NASA-CASE-XNP-01059] c23 N71-21821

MCLEAN, P. B.
Supersonic aircraft Patent
[NASA-CASE-XLA-04451] c02 N71-12243

MCLYMAN, C. W. T.
Inverter oscillator with voltage feedback
[NASA-CASE-NPO-10760] c09 N72-25254

Banded transformer cores
[NASA-CASE-NPO-11966-1] c33 N74-17928

MCLYMAN, W. T.
Phase substitution of spare converter for a
failed one of parallel phase staggered
converters
[NASA-CASE-NPO-13812-1] c33 N77-30365

Elimination of current spikes in buck power
converters
[NASA-CASE-NPO-14505-1] c33 N81-19393

Push-pull converter with energy saving circuit
for protecting switching transistors from peak
power stress
[NASA-CASE-NPO-14316-1] c33 N81-33404

MCHASTER, L. E.
Meteoroid detector
[NASA-CASE-LAR-10483-1] c14 N73-32327

MCHEN, M. F.
Vapor phase growth of groups 3-5 compounds by
hydrogen chloride transport of the elements
[NASA-CASE-LAR-11144-1] c25 N75-26043

MCBUTT, W. C.
Dual latching solenoid valve Patent
[NASA-CASE-XMS-05890] c09 N71-23191

MCBONALD, A. D.
Thin film gauge
[NASA-CASE-NPO-10617-1] c35 N74-22095

MCSTAY, J. J.
Apparatus including a plurality of spaced
transformers for locating short circuits in
cables
[NASA-CASE-KSC-10899-1] c33 N79-18193

MCWILLIAMS, I. G.
Compact spectroradiometer
[NASA-CASE-HQN-10683] c14 N71-34389

Two color horizon sensor
[NASA-CASE-ERC-10174] c14 N72-25409

MEAD, D. C.
Variable frequency oscillator with temperature
compensation Patent
[NASA-CASE-XNP-03916] c09 N71-28810

MEADOR, T. G., JR.
Light shield and cooling apparatus
[NASA-CASE-LAR-10089-1] c34 N74-23066

MEALY, G. E.
Electrostatic thruster with improved insulators
Patent
[NASA-CASE-XLE-01902] c28 N71-10574

High voltage divider system Patent
[NASA-CASE-XLE-02008] c09 N71-21583

MEDCALF, W. A.
Gas filter mounting structure
[NASA-CASE-MSC-12297] c14 N72-23457

MEGIE, G. J.
Tunable injection-locked pulsed CO2 laser
[NASA-CASE-NPO-14984-1] c36 N81-15350

MEINTEL, A. J., JR.
Combined optical attitude and altitude
indicating instrument Patent
[NASA-CASE-XLA-01907] c14 N71-23268

MEISENHOLDER, G. W.
Photosensitive device to detect bearing
deviation Patent
[NASA-CASE-XNP-00438] c21 N70-35089

Roll attitude star sensor system Patent
[NASA-CASE-XNP-01307] c21 N70-41856

MEISSINGER, H. F.
Method of and device for determining the
characteristics and flux distribution of
micrometeorites
[NASA-CASE-NPO-12127-1] c91 N74-13130

MELAMED, I.
Angular velocity and acceleration measuring
apparatus
[NASA-CASE-ERC-10292] c14 N72-25410

MELFI, L. T., JR.
Gas analyzer for bi-gaseous mixtures Patent
[NASA-CASE-XLA-01131] c14 N71-10774

Ionization vacuum gauge with all but the end of
the ion collector shielded Patent
[NASA-CASE-XLA-07424] c14 N71-18482

MELLARS, B.
Sideband heterodyne receiver for laser
communication system
[NASA-CASE-GSC-12053-1] c32 N77-28346

MELUGIN, J. F.
Technique for recovery of voice data from heat
damaged magnetic tape
[NASA-CASE-MSC-14219-1] c32 N74-27612

MELVILLE, R. D. S.
Stark-effect modulation of CO2 laser with NH2D

[NASA-CASE-NPO-11945-1]	c36 N76-18427	[NASA-CASE-INP-00431]	c09 N70-38998
MENEFEE, E. O.		MEYER, E. A.	
Three-axis controller Patent		High-temperature, high-pressure spherical	
[NASA-CASE-XAC-01404]	c05 N70-41581	segment valve Patent	
Proportional controller Patent		[NASA-CASE-XAC-00074]	c15 N70-34817
[NASA-CASE-XAC-03392]	c03 N70-41954	MEYER, T. B.	
MENGES, E. J.		Method of producing silicon	
Precipitation detector Patent		[NASA-CASE-NPO-14382-1]	c31 N80-18231
[NASA-CASE-XLA-02619]	c10 N71-26334	MICALB, F. J.	
Dielectric molding apparatus Patent		Process for preparation of large-particle-size	
[NASA-CASE-LAR-10121-1]	c15 N71-26721	monodisperse latexes	
MENICHELLI, V. J.		[NASA-CASE-NFS-25000-1]	c25 N81-19242
Optically detonated explosive device		MICHAEL, J. B.	
[NASA-CASE-NPO-11743-1]	c28 N74-27425	Connector - Electrical	
Electroexplosive device		[NASA-CASE-XLA-01288]	c09 N69-21470
[NASA-CASE-NPO-13858-1]	c28 N79-11231	Missile stage separation indicator and stage	
MERTZER, C. A.		initiator Patent	
Horn antenna having V-shaped corrugated slots		[NASA-CASE-XLA-00791]	c03 N70-39930
[NASA-CASE-LAR-11112-1]	c32 N76-15330	MICHAUD, E. B.	
MENZIES, R. T.		Urine collection device	
Monitoring atmospheric pollutants with a		[NASA-CASE-MSC-16433-1]	c52 N78-27750
heterodyne radimeter transmitter-receiver		Urine collection device	
[NASA-CASE-NPO-11919-1]	c35 N74-11284	[NASA-CASE-MSC-16433-1]	c52 N81-24711
Fluorescence detector for monitoring atmospheric		Urine collection apparatus	
pollutants		[NASA-CASE-MSC-18381-1]	c52 N81-28740
[NASA-CASE-NPO-13231-1]	c45 N75-27585	MICHEL, R. E.	
Tunable injection-locked pulsed CO2 laser		Convoluting device for forming convolutions and	
[NASA-CASE-NPO-14984-1]	c36 N81-15350	the like Patent	
MERHAV, S. J.		[NASA-CASE-INP-05297]	c15 N71-23811
Autonomous navigation system		MICKA, E. Z.	
[NASA-CASE-ABC-11257-1]	c04 N81-21047	Cross correlation anomaly detection system	
MERLEN, E. M.		[NASA-CASE-NPO-13283]	c38 N78-17395
Horizon sensor with a plurality of fixedly		Automatic visual inspection system for	
positioned radiation compensated radiation		microelectronics	
sensitive detectors Patent		[NASA-CASE-NPO-13282]	c38 N78-17396
[NASA-CASE-INP-06957]	c14 N71-21088	MICKELSEN, W. R.	
MERRBAUM, S.		High-vacuum condenser tank for ion rocket tests	
Multifunctional transducer		Patent	
[NASA-CASE-NPO-14329-1]	c52 N81-20703	[NASA-CASE-XLE-00168]	c11 N70-33278
MERRICK, V. K.		MIDDLETON, J. H.	
Stabilization of gravity oriented satellites		Technique for extending the frequency range of	
Patent		digital dividers	
[NASA-CASE-XAC-01591]	c31 N71-17729	[NASA-CASE-LAR-10730-1]	c33 N74-10223
MERRILL, J. T., IV		MIDDLETON, O.	
Apparatus for applying simulator g-forces to an		Bonding machine for forming a solar array strip	
ara of an aircraft simulator pilot		[NASA-CASE-NPO-13652-2]	c44 N79-24431
[NASA-CASE-LAR-10550-1]	c09 N74-30597	MIDDLETON, B. L.	
MESSINGO, S. V.		Cryogenic thermal insulation Patent	
Apparatus for positioning modular components on		[NASA-CASE-XMP-05046]	c33 N71-28892
a vertical or overhead surface		MIDDLETON, W. D.	
[NASA-CASE-LAR-11465-1]	c37 N76-21554	Supersonic aircraft Patent	
MESSNER, A.		[NASA-CASE-XLA-04451]	c02 N71-12243
System for generating timing and control signals		MIEBTSCHIN, J. L.	
[NASA-CASE-NPO-13125-1]	c33 N75-19519	Radio frequency filter device	
MESZAROS, G.		[NASA-CASE-XLA-02609]	c09 N72-25256
Recovery of radiation damaged solar cells		MINSAN, D. P.	
through thermal annealing		Frequency shift keying apparatus Patent	
[NASA-CASE-XGS-04047-2]	c03 N72-11062	[NASA-CASE-XGS-01537]	c07 N71-23405
METCALFE, A. G.		MIKULAS, E. H., JR.	
Silicide coatings for refractory metals Patent		Composite sandwich lattice structure	
[NASA-CASE-XLE-10910]	c18 N71-29040	[NASA-CASE-LAR-11898-1]	c24 N78-10214
METZGER, A. E.		Method of making a composite sandwich lattice	
Dual purpose optical instrument capable of		structure	
simultaneously acting as spectrometer and		[NASA-CASE-LAR-11898-2]	c24 N78-17149
diffractometer		MILDICE, J. W.	
[NASA-CASE-INP-05231]	c14 N73-28491	Light radiation direction indicator with a	
METZLER, A. J.		baffle of two parallel grids	
Black-body furnace Patent		[NASA-CASE-INP-03930]	c14 N69-24331
[NASA-CASE-XLE-01399]	c33 N71-15625	MILES, P. A.	
MEYER, A. J., JR.		Clear air turbulence detector	
Modification and improvements to cooled blades		[NASA-CASE-NFS-21244-1]	c36 N75-15028
Patent		MILES, R. T.	
[NASA-CASE-XLE-00092]	c15 N70-33264	Oceanic wave measurement system	
Aerial capsule emergency separation device Patent		[NASA-CASE-NFS-23862-1]	c48 N80-18667
[NASA-CASE-XLA-00115]	c03 N70-33343	MILKULLA, V.	
Space capsule Patent		Method for making a hot wire anemometer and	
[NASA-CASE-XLA-00149]	c31 N70-37938	product thereof	
Vehicle parachute and equipment jettison system		[NASA-CASE-ABC-10900-1]	c35 N77-24454
Patent		MILLER, A. J.	
[NASA-CASE-XLA-00195]	c02 N70-38009	Binary to binary coded decimal converter	
Atlation structures Patent		[NASA-CASE-GSC-12044-1]	c60 N78-17691
[NASA-CASE-IMS-01816]	c33 N71-15623	MILLER, B. A.	
Space capsule Patent		Self stabilizing sonic inlet	
[NASA-CASE-XLA-01332]	c31 N71-15664	[NASA-CASE-LEW-11890-1]	c05 N79-24976
MEYER, J. A.		MILLER, C. E.	
Altitude sensing device		Densitometer Patent	
[NASA-CASE-IMS-01994-1]	c14 N72-17326	[NASA-CASE-XLE-00688]	c14 N70-41330
MEYER, J. F.		MILLER, C. G.	
Time-division multiplexer Patent		Dispensing targets for ion beam particle	

generators
[NASA-CASE-NPO-13112-1] c73 N74-26767
Sampler of gas borne particles
[NASA-CASE-NPO-13396-1] c35 N76-18401
Indicator providing continuous indication of the
presence of a specific pollutant in air
[NASA-CASE-NPO-13474-1] c45 N76-21742
Cryostat system for temperatures on the order of
2 deg K or less
[NASA-CASE-NPO-13459-1] c31 N77-10229
Compact, high intensity arc lamp with internal
magnetic field producing means
[NASA-CASE-NPO-11510-1] c33 N77-21315
Depressurization of arc lamps
[NASA-CASE-NPO-10790-1] c33 N77-21316
Arc control in compact arc lamps
[NASA-CASE-NPO-10870-1] c33 N77-22386
Low to high temperature energy conversion system
[NASA-CASE-NPO-13510-1] c44 N77-32581
Three-dimensional tracking solar energy
concentrator and method for making same
[NASA-CASE-NPO-13736-1] c44 N77-32583
Portable linear-focused solar thermal energy
collecting system
[NASA-CASE-NPO-13734-1] c44 N78-10554
Purging means and method for Xenon arc lamps
[NASA-CASE-NPO-11978] c31 N78-17238
Low cost solar energy collection system
[NASA-CASE-NPO-13579-1] c44 N78-17460
Underground mineral extraction
[NASA-CASE-NPO-14140-1] c31 N78-24387
Solar pond
[NASA-CASE-NPO-13581-2] c44 N78-31525
Primary reflector for solar energy collection
systems
[NASA-CASE-NPO-13579-4] c44 N79-14529
Primary reflector for solar energy collection
systems and method of making same
[NASA-CASE-NPO-13579-3] c44 N79-24432
Solar energy collection system
[NASA-CASE-NPO-13579-2] c44 N79-24433
Multiple anode arc lamp system
[NASA-CASE-NPO-10857-1] c33 N80-14330
Underground mineral extraction
[NASA-CASE-NPO-14140-1] c43 N81-26509

MILLER, D. P.
Controllers Patent
[NASA-CASE-XMS-07487] c15 N71-23255

MILLER, H. B.
Compensating radiometer
[NASA-CASE-XLA-04556] c14 N69-27484
Heat sensing instrument Patent
[NASA-CASE-XLA-01551] c14 N71-22989
Spherical measurement device
[NASA-CASE-XLA-06683] c14 N72-28436

MILLER, J. A., JR.
Method of forming difunctional polyisobutylene
[NASA-CASE-NPO-10893] c27 N73-22710

MILLER, J. C.
Apparatus for detecting the amount of material
in a resonant cavity container Patent
[NASA-CASE-XNP-02500] c18 N71-27397

MILLER, J. E.
Satellite interlace synchronization system
[NASA-CASE-GSC-10390-1] c07 N72-11149

MILLER, J. G.
Ultrasonic calibration device
[NASA-CASE-LAR-11435-1] c35 N76-15432

MILLER, J. L.
Boring bar drive mechanism Patent
[NASA-CASE-XLA-03661] c15 N71-33518

MILLER, P. C.
Low temperature aluminum alloy Patent
[NASA-CASE-XMP-02786] c17 N71-20743

MILLER, R. A.
Corrosion resistant thermal barrier coating
[NASA-CASE-LEW-13088-1] c26 N81-25188

MILLER, R. E.
Photocapacitive image converter
[NASA-CASE-LAR-12513-1] c33 N80-28635

MILLIGAN, G. C.
Digital memory sense amplifying means Patent
[NASA-CASE-XNP-01012] c08 N71-28925

MILLIKEN, D. B.
Film feed camera having a detent means Patent
[NASA-CASE-LAR-10686] c14 N71-28935

MILLIKEN, J. P.
Linear differential pressure sensor Patent
[NASA-CASE-XMP-01974] c14 N71-22752

MILLS, M. E.
Tracking antenna system Patent
[NASA-CASE-GSC-10553-1] c07 N71-19854
Antenna array at focal plane of reflector with
coupling network for beam switching Patent
[NASA-CASE-GSC-10220-1] c07 N71-27233

MILLS, S. E.
Transient-compensated SCR inverter
[NASA-CASE-XLA-08507] c09 N69-39984
Apparatus for microbiological sampling
[NASA-CASE-LAR-11069-1] c35 N75-12272
Automatic inoculating apparatus
[NASA-CASE-LAR-11074-1] c51 N75-13502
Automatic microbial transfer device
[NASA-CASE-LAR-11354-1] c35 N75-27330
Measurement of gas production of microorganisms
[NASA-CASE-LAR-11326-1] c35 N75-33368
Automated single-slide staining device
[NASA-CASE-LAR-11649-1] c51 N77-27677

MILLY, J. J.
Satellite despin device Patent
[NASA-CASE-XMP-08523] c31 N71-20396

MINKIN, E. L.
Liquid flow sight assembly Patent
[NASA-CASE-XLE-02998] c14 N70-42074

MINOTT, E. O.
Retrodirective optical system
[NASA-CASE-XGS-04480] c16 N69-27491
Retrodirective modulator Patent
[NASA-CASE-GSC-10062] c14 N71-15605
Interferometric angle monitor
[NASA-CASE-GSC-12614-1] c35 N81-12386
Multiprism collimator
[NASA-CASE-GSC-12608-1] c35 N81-12387

MINTER, E. J.
Method of peening and portable peening gun
[NASA-CASE-MPS-23047-1] c37 N76-18454

MINTON, F. B.
Window defect planar mapping technique
[NASA-CASE-MSC-19442-1] c74 N77-10899

MINTON, U. O.
Window defect planar mapping technique
[NASA-CASE-MSC-19442-1] c74 N77-10899

MIRYCH, E. J.
Modification of the electrical and optical
properties of polymers
[NASA-CASE-LEW-13027-1] c27 N80-24437

MIRYCH, E. J., JR.
Hydrogen hollow cathode ion source
[NASA-CASE-LEW-12940-1] c72 N80-33186

MISERENTINO, E.
Displacement probes with self-contained exciting
medium
[NASA-CASE-LAR-11690-1] c35 N80-14371

MITCHELL, D. E.
Borescope with variable angle scope
[NASA-CASE-MFS-15162] c14 N72-32452

MITCHELL, P. E.
Attitude control for spacecraft Patent
[NASA-CASE-XNP-00294] c21 N70-36938

MITCHELL, G. A.
Airflow control system for supersonic inlets
[NASA-CASE-LEW-11188-1] c02 N74-20646

MITCHELL, E. M.
Method and apparatus for detection and location
of microleaks Patent
[NASA-CASE-XMP-02307] c14 N71-10779

MITCHELL, V. M.
Digital cardiometer system Patent
[NASA-CASE-XMS-02399] c05 N71-22896

MITCHEM, L. L., JR.
Collapsible loop antenna for space vehicle Patent
[NASA-CASE-XMP-00437] c07 N70-40202

MIYSON, J. S.
Ring wing tension vehicle Patent
[NASA-CASE-XLA-04901] c31 N71-24315

MOACHIN, J.
Ionen membrane separator
[NASA-CASE-NPO-11091] c18 N72-22567
Method of making hollow elastomeric bodies
[NASA-CASE-NPO-13535-1] c37 N76-31524
Double-beam optical method and apparatus for
measuring thermal diffusivity and other
molecular dynamic processes in utilizing the
transient thermal lens effect
[NASA-CASE-NPO-14657-1] c74 N81-17887

MOECKEL, E. E.
Electro-thermal rocket Patent
[NASA-CASE-XLE-00267] c28 N70-33356

MORDE, L. W.
 Wide range analog-to-digital converter with a variable gain amplifier
 [NASA-CASE-NPO-11018] c08 N72-21200
 Digital control and information system
 [NASA-CASE-NPO-11016] c08 N72-31226

MORN, W. K.
 Self-cycling fluid heater
 [NASA-CASE-MSC-15567-1] c33 N73-16918

MOFFITT, P. L.
 Image magnification adapter for cameras Patent
 [NASA-CASE-XNF-03844-1] c14 N71-26474

MOGAVERO, L. E.
 System and method for tracking a signal source
 [NASA-CASE-HQN-10880-1] c17 N78-17140

MONDT, J. P.
 Nuclear thermionic converter
 [NASA-CASE-NPO-13121-1] c73 N77-18891

MONFORD, L. G., JR.
 Radiometric temperature reference Patent
 [NASA-CASE-MSC-13276-1] c14 N71-27058
 Multifunction audio digitizer
 [NASA-CASE-MSC-13855-1] c35 N74-17885
 Digital communication system
 [NASA-CASE-MSC-13912-1] c32 N74-30524
 Binary concatenated coding system
 [NASA-CASE-MSC-14082-1] c60 N76-23850

MONSON, D. J.
 Dual-beam skin friction interferometer
 [NASA-CASE-ARC-11354-1] c36 N81-29415

MONTETH, J. H.
 Flow velocity and directional instrument
 [NASA-CASE-LAR-10855-1] c14 N73-13415

MONTETH, L. K.
 Particulate and aerosol detector
 [NASA-CASE-LAR-11434-1] c35 N76-22509

MONTGOMERY, L. C.
 Process for preparing sterile solid propellants Patent
 [NASA-CASE-XNP-01749] c27 N70-41897
 Processing for producing a sterilized instrument Patent
 [NASA-CASE-XNP-09763] c14 N71-20461

MONTGOMERY, L. D.
 Readout electrode assembly for measuring biological impedance
 [NASA-CASE-ARC-10816-1] c35 N76-24525

MONTOYA, L. C.
 System for use in conducting wake investigation for a wing in flight
 [NASA-CASE-FRC-11024-1] c02 N80-28300
 Skin friction measuring device for aircraft
 [NASA-CASE-FRC-11029-1] c06 N81-17057

MOODY, D. L., JR.
 Readout electrode assembly for measuring biological impedance
 [NASA-CASE-ARC-10816-1] c35 N76-24525

MOONEY, V.
 Prosthesis coupling
 [NASA-CASE-KSC-11069-1] c52 N79-26772

MOORE, C. D.
 Waveform simulator Patent
 [NASA-CASE-NPO-10251] c10 N71-27365

MOORE, H. D.
 Reversible ring counter employing cascaded single SCR stages Patent
 [NASA-CASE-XGS-01473] c09 N71-10673

MOORE, R. C.
 Open loop digital frequency multiplier
 [NASA-CASE-MSC-12709-1] c33 N77-24375

MOORE, R. L.
 Trigonometric vehicle guidance assembly which aligns the three perpendicular axes of two three-axes systems Patent
 [NASA-CASE-XMF-00684] c21 N71-21688
 Rotary actuator
 [NASA-CASE-NPO-10680] c31 N73-14855

MOORE, T. J.
 Welding blades to rotors
 [NASA-CASE-LEW-10533-1] c15 N73-28515
 Enhanced diffusion welding
 [NASA-CASE-LEW-11388-1] c15 N73-32358
 Production of hollow components for rolling element bearings by diffusion welding
 [NASA-CASE-LEW-11026-1] c15 N73-33383
 Apparatus for welding blades to rotors
 [NASA-CASE-LEW-10533-2] c37 N74-11300
 Diffusion welding in air
 [NASA-CASE-LEW-11387-1] c37 N74-16128

MOORE, W. A.
 Journal bearings
 [NASA-CASE-LEW-11076-1] c37 N74-21061
 Journal Bearings
 [NASA-CASE-LEW-11076-2] c37 N74-32921
 Lubricated journal bearing
 [NASA-CASE-LEW-11076-3] c37 N75-30562
 Fluid journal bearings
 [NASA-CASE-LEW-11076-4] c37 N76-15461

MORANDO, J. A.
 Hydraulic transformer Patent
 [NASA-CASE-MFS-20830] c15 N71-30028

MORDECAI, T. T.
 Method of recording a gas flow pattern Patent
 [NASA-CASE-XNF-01779] c12 N71-20815

MORCROFT, J. E.
 Incremental motion drive system Patent
 [NASA-CASE-XNP-08897] c15 N71-17694

MORELLI, P. A.
 Process for preparing sterile solid propellants Patent
 [NASA-CASE-XNP-01749] c27 N70-41897
 Processing for producing a sterilized instrument Patent
 [NASA-CASE-XNP-09763] c14 N71-20461

MOREMAN, O. S., III
 Deformable bearing seat
 [NASA-CASE-LEW-12527-1] c37 N77-32500
 Bearing seat usable in a gas turbine engine
 [NASA-CASE-LEW-12477-1] c37 N77-32501

MORGAN, I. T., JR.
 Translatory shock absorber for attitude sensors
 [NASA-CASE-MFS-22905-1] c19 N76-22284

MORGAN, J. E.
 Condition sensor system and method
 [NASA-CASE-MSC-14805-1] c54 N78-32720

MORGAN, L. E.
 Serial data correlator/code translator
 [NASA-CASE-KSC-11025-1] c32 N79-28383

MORGAN, W. C.
 Thin-walled pressure vessel Patent
 [NASA-CASE-XLE-04677] c15 N71-10577

MORISSETTE, S.
 Junction range finder
 [NASA-CASE-KSC-10108] c14 N73-25461

MORRELL, G.
 Method for continuous variation of propellant flow and thrust in propulsive devices Patent
 [NASA-CASE-XLE-00177] c28 N70-40367

MORRIS, D. E.
 Silphenylenesiloxane polymers having in-chain perfluoroalkyl groups
 [NASA-CASE-MFS-20979] c06 N72-25151
 Polymerizable disilanol having in-chain perfluoroalkyl groups
 [NASA-CASE-MFS-20979-2] c06 N73-32030

MORRIS, J. F.
 Probes having ring and primary sensor at same potential to prevent collection of stray wall currents in ionized gases
 [NASA-CASE-XLE-00690] c25 N69-39884
 Thermocouples of tantalum and rhenium alloys for more stable vacuum-high temperature performance
 [NASA-CASE-LEW-12050-1] c35 N77-32454
 Cesium thermionic converters having improved electrodes
 [NASA-CASE-LEW-12038-3] c44 N78-25555
 Thermocouples of molybdenum and iridium alloys for more stable vacuum-high temperature performance
 [NASA-CASE-LEW-12174-2] c35 N79-14346
 Improved thermionic energy converters
 [NASA-CASE-LEW-12443-1] c44 N81-19561
 Heat pipes containing alkali metal working fluid
 [NASA-CASE-LEW-12253-1] c34 N81-22310

MORRIS, J. E.
 Difference circuit Patent
 [NASA-CASE-XNP-08274] c10 N71-13537

MORRIS, P. W.
 Coal-shale interface detection system
 [NASA-CASE-MFS-23720-2] c43 N80-14423

MORRISON, R. D.
 Anti-fog composition
 [NASA-CASE-MSC-13530-2] c23 N75-14834

MORSE, C. P.
 Method and device for cooling Patent
 [NASA-CASE-HQN-00938] c33 N71-29053

MORTENSEN, L. O.
 Impact monitoring apparatus

[NASA-CASE-MSC-15626-1] c14 N72-25411

MOSEB, B. G.
Zeta potential flowmeter Patent
[NASA-CASE-INP-06509] c14 N71-23226
Method for controlling vapor content of a gas
[NASA-CASE-NPO-10633] c03 N72-28025
Polymeric compositions and their method of manufacture
[NASA-CASE-NPO-10424-1] c27 N81-24258

MOSEB, J. C.
Electronic checkout system for space vehicles Patent
[NASA-CASE-XKS-08012-2] c31 N71-15566

MOSIER, B.
Pressed disc type sensing electrodes with ion-screening means Patent
[NASA-CASE-XMS-04212-1] c05 N71-12346
Plated electrodes Patent
[NASA-CASE-XMS-04213-1] c09 N71-26002
Method of making a perspiration resistant biopotential electrode
[NASA-CASE-MSC-90153-2] c05 N72-25120

MOSIER, J. R.
Decontamination of petroleum products Patent
[NASA-CASE-INP-03835] c06 N71-23499

MOSSOLANI, D. L.
Rotary leveling base platform
[NASA-CASE-ARC-10981-1] c37 N78-27425

MOUNTVALA, A. J.
Lightweight refractory insulation and method of preparing the same Patent
[NASA-CASE-INP-05279] c18 N71-16124

MOYER, K. W.
Redundant actuating mechanism Patent
[NASA-CASE-XGS-08718] c15 N71-24600
Delayed simultaneous release mechanism
[NASA-CASE-GSC-10814-1] c03 N73-20039

MOYERS, C. V.
System for sterilizing objects
[NASA-CASE-KSC-11085-1] c54 N81-24724

MROZ, T. S.
Direct heating surface combustor
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MUEHTER, P. P.
Heat sterilizable patient ventilator
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MUELLER, R. I.
Method for forming a solar array strip
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MUELLER, R. L.
Solar array strip and a method for forming the same
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MUELLER, W. A.
Aldehyde-containing urea-absorbing polysaccharides
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Dialysis system
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MUGLER, S. W.
Precipitation detector Patent
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MULHERN, J. E., JR.
Recorder using selective noise filter
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MULLEN, D. L.
Matched thermistors for microwave power meters Patent
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Broadband microwave waveguide window Patent
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MULLEN, L. O.
Electrical insulating layer process
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MULLER, K.
Electric arc light source having undercut recessed anode
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MULLER, R. M.
Method and apparatus for measuring web material wound on a reel
[NASA-CASE-GSC-11902-1] c38 N77-17495

MULLIKEN, R. F.
Method of repairing discontinuity in fiberglass structures
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MUNOLA, P. B.
Laser head for simultaneous optical pumping of several dye lasers
[NASA-CASE-LAR-11341-1] c36 N75-19655

MUNFORD, J. A.
Laser measuring system for incremental assemblies
[NASA-CASE-GSC-12321-1] c36 N80-18380

MUNOZ, R. E.
High efficiency multivibrator Patent
[NASA-CASE-IAC-00942] c10 N71-16042
Nonlinear analog-to-digital converter Patent
[NASA-CASE-XAC-04031] c08 N71-18594
Demodulation system Patent
[NASA-CASE-XAC-04030] c10 N71-19472
Phase quadrature-plural channel data transmission system Patent
[NASA-CASE-IAC-06302] c08 N71-19763
Continuous Fourier transform method and apparatus
[NASA-CASE-ARC-10466-1] c60 N75-13539

MUNSON, R. E.
Turnstile slot antenna
[NASA-CASE-GSC-11428-1] c32 N74-20864

MURACA, R. F.
Apparatus for testing polymeric materials Patent
[NASA-CASE-INP-09699] c06 N71-24607
Procedure and apparatus for determination of water in nitrogen tetroxide
[NASA-CASE-NPO-10234] c06 N72-17094

MURCH, R. M.
Metal containing polymers from cyclic tetrameric phenylphosphonitridamides Patent
[NASA-CASE-HQN-10364] c06 N71-27363

MURPHY, A. J.
Optically actuated two position mechanical mover
[NASA-CASE-NFO-13105-1] c37 N74-21060

MURPHY, D. W.
Frangible link
[NASA-CASE-MSC-11849-1] c15 N72-22488
Pressure limiting propellant actuating system
[NASA-CASE-MSC-18179-1] c20 N80-18097

MURPHY, F. L.
Bimetallic power controlled actuator
[NASA-CASE-INP-09776] c09 N69-39929

MURPHY, J. P.
All sky pointing attitude control system
[NASA-CASE-ARC-10716-1] c35 N77-20399
High acceleration cable deployment system
[NASA-CASE-ARC-11256-1] c37 N79-23432

MURPHY, W. J.
Barium release system
[NASA-CASE-LAR-10670-1] c06 N73-30097
Rocket having barium release system to create ion clouds in the upper atmosphere
[NASA-CASE-LAR-10670-2] c15 N74-27360

MURTY, M. V. R. K.
Concave grating spectrometer Patent
[NASA-CASE-XGS-01036] c14 N70-40003

MUSICK, R. O.
Two-axis controller Patent
[NASA-CASE-XFR-04104] c03 N70-42073

MUSSETT, R. W.
Device for separating occupant from an ejection seat Patent
[NASA-CASE-XMS-04625] c05 N71-20718

MYERS, D. A.
Portable environmental control system Patent
[NASA-CASE-XMS-09632-1] c05 N71-11203

MYERS, I. T.
Regulated high efficiency, lightweight capacitor-diode multiplier dc to dc converter
[NASA-CASE-LEW-12791-1] c33 N78-32341

MYERS, W. M.
Duct coupling for single-handed operation Patent
[NASA-CASE-MFS-20395] c15 N71-24903
Mechanical thermal motor
[NASA-CASE-MFS-23062-1] c37 N77-12402
Spherical bearing
[NASA-CASE-MFS-23447-1] c37 N79-11404
Amplified wind turbine apparatus
[NASA-CASE-MFS-23830-1] c44 N80-21831

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NAESETH, R. L.
Aeroflexible structures
[NASA-CASE-XLA-06095] c01 N69-39981

NAGANO, S.
Overload protection system for power inverter
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Module failure isolation circuit for paralleled inverters

[NASA-CASE-NPO-14000-1]	c33 N79-24254	[NASA-CASE-LAR-10310-1]	c10 N73-20253
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Low current linearization of magnetic amplifier for dc transducer		Emergency escape system Patent	c15 N71-27067
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NAGLE, W. J.		NEALY, J. E.	
Multi-cell battery protection system		Combustion detector	c14 N73-16484
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Toroidal cell and battery		NELSON, B.	
[NASA-CASE-LEW-12918-1]	c44 N81-24521	Deflective rod switch with elastic support and sealing means Patent	c09 N71-12518
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NAIDITCH, S.		Optical machine tool alignment indicator Patent	c15 N71-26673
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NAIMBE, J.		Flipflop interrogator and bi-polar current driver Patent	c10 N71-19547
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NAKADA, H. P.		Ablation sensor	c14 N69-39975
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NAKANURA, H. H.		[NASA-CASE-XLA-01552]	
Lightweight refractory insulation and method of preparing the same Patent		NELSON, D. E.	
[NASA-CASE-XMP-05279]	c18 N71-16124	Convoluting device for forming convolutions and the like Patent	c15 N71-23811
NAKANISHI, S.		[NASA-CASE-XNP-05297]	
Ion thruster cathode Patent Application		NELSON, E. F.	
[NASA-CASE-LEW-10814-1]	c28 N70-35422	Safety-type locking pin	c15 N72-11385
Plasma device feed system Patent		[NASA-CASE-MFS-18495]	
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Ion thruster accelerator system Patent		Telemetry word forming unit	c09 N69-24333
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Propellant feed isolator Patent		NELSON, W. J.	
[NASA-CASE-LEW-10210-1]	c28 N71-26781	Slosh alleviator Patent	c15 N71-19569
Single grid accelerator for an ion thruster		[NASA-CASE-XLA-05749]	
[NASA-CASE-XLE-10453-2]	c28 N73-27699	NEUBHEIM, H. H.	
NAKICH, H. B.		Inert gas metallic vapor laser	c36 N75-32441
Apparatus for scanning the surface of a cylindrical body		[NASA-CASE-NPO-13449-1]	
[NASA-CASE-NPO-11861-1]	c36 N74-26009	NEUBY, D. T.	
Digital servo control of random sound test excitation		Hole cutter	c37 N75-25186
[NASA-CASE-NPO-11623-1]	c71 N74-31148	[NASA-CASE-MFS-22649-1]	
NANCE, H. H.		NEUSCHUB, A. L., JR.	
A dc motor speed control system Patent		Electromagnetic mirror drive system	c14 N69-27461
[NASA-CASE-MFS-14610]	c09 N71-28886	[NASA-CASE-XLA-03724]	
NAPLES, J. F.		Ac power amplifier Patent Application	c09 N70-34559
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[NASA-CASE-XMS-05516]	c15 N71-17803	Variable duration pulse integrator Patent	c10 N71-23084
NARASIMHAN, K. V.		[NASA-CASE-XLA-01219]	
System for detecting substructure microfractures and method therefore		Variable width pulse integrator Patent	c10 N71-23315
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NASH, D. O.		NEUSCOMB, J. F.	
Sound-suppressing structure with thermal relief		Null device for hand controller Patent	c15 N71-20740
[NASA-CASE-LEW-12658-1]	c71 N79-14871	[NASA-CASE-XLA-01808]	
NASON, G. H.		NEUSCOMB, W. L.	
Flexible blade antenna Patent		Quick release separation mechanism Patent	c15 N70-41679
[NASA-CASE-MSC-12101]	c09 N71-16720	[NASA-CASE-XLA-01441]	
NASUTI, A. J.		NEUSCOMBE, C. A.	
Test fixture for pellet-like electrical elements		Method for making a heat insulating and ablative structure	c15 N69-24322
[NASA-CASE-XNP-06032]	c09 N69-21926	[NASA-CASE-XMS-01108]	
Support structure for irradiated elements Patent		NEWMAN, D. F.	
[NASA-CASE-XNP-06031]	c15 N71-15606	Test stand system for vacuum chambers	c11 N73-20267
NATHAN, B.		[NASA-CASE-MFS-21362]	
System for plotting subsoil structure and method therefor		NEWMAN, J. B.	
[NASA-CASE-NPO-14191-1]	c31 N80-32584	Catalyst bed removing tool Patent	c15 N70-36901
NAUMANN, E. C.		[NASA-CASE-IFR-00811]	
Fatigue testing device Patent		NEWMAN, J. H.	
[NASA-CASE-XLA-02131]	c32 N70-42003	New polymers of perfluorobutadiene and method of manufacture Patent application	c06 N70-11251
Automatic fatigue test temperature programmer Patent		[NASA-CASE-NPO-10863]	
[NASA-CASE-XLA-02059]	c33 N71-24276	Polymers of perfluorobutadiene and method of manufacture	c06 N72-25152
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Function generator for synthesizing complex vibration mode patterns		Method and apparatus for fabricating improved solar cell modules	c44 N81-14389
		[NASA-CASE-NPO-14416-1]	
		NICHOLS, G. B.	
		Apparatus for controlling the velocity of an electromechanical drive for interferometers and the like Patent	

[NASA-CASE-XGS-03532] c14 N71-17627
Apparatus for phase stability determination Patent
[NASA-CASE-XGS-01118] c10 N71-23662

NICHOLS, G. H.
Aircraft canopy lock
[NASA-CASE-FRC-11065-1] c05 N81-24047

NICHOLS, J. J.
Force measuring instrument Patent
[NASA-CASE-XNF-00456] c14 N70-34705

NICHOLS, M. E.
Nacelle afterbody for jet engines Patent
[NASA-CASE-XLA-10450] c28 N71-21493
Dual cycle aircraft turbine engine
[NASA-CASE-LAR-11310-1] c07 N77-28118

NICKLAS, J. C.
Attitude control for spacecraft Patent
[NASA-CASE-XNF-02982] c31 N70-41855
Solar vane actuator Patent
[NASA-CASE-XNF-05535] c14 N71-23040

NICOL, W. S.
Vapor deposition apparatus
[NASA-CASE-HQN-10462] c25 N75-29192

NIEDRA, J. M.
Pulse coupling circuit
[NASA-CASE-LEW-10433-1] c09 N72-22197

NIEDZWIECKI, R. W.
Swirl can primary combustor
[NASA-CASE-LEW-11326-1] c23 N73-30665
Controlled separation combustor
[NASA-CASE-LEW-11593-1] c20 N76-14190

NIELSON, T. L.
Technique of elbow bending small jacketed transfer lines Patent
[NASA-CASE-XNF-10475] c15 N71-24679

NIER, A. O.
Mass spectrometer with magnetic pole pieces providing the magnetic fields for both the magnetic sector and an ion-type vacuum pump
[NASA-CASE-NPO-13663-1] c35 N77-14406

NIESSEN, P. R.
Filtering technique based on high-frequency plant modeling for high-gain control
[NASA-CASE-LAR-12215-1] c08 N79-23097

NISEN, D. B.
Containerless high temperature calorimeter apparatus
[NASA-CASE-MFS-23923-1] c35 N81-19426
Method and apparatus for supercooling and solidifying substances
[NASA-CASE-MFS-25242-1] c35 N81-24413

NISSIN, E.
Suppression of flutter
[NASA-CASE-LAR-10682-1] c02 N73-26004

NISWANDER, J. K.
Memory-based frame synchronizer
[NASA-CASE-GSC-12430-1] c32 N80-20453
Memory-based parallel data output controller
[NASA-CASE-GSC-12447-1] c60 N80-21987

NITTA, H.
High-temperature, high-pressure spherical segment valve Patent
[NASA-CASE-XAC-00074] c15 N70-34817

NIXON, D. L.
Parabolic reflector horn feed with spillover correction Patent
[NASA-CASE-XNF-00540] c09 N70-35382
Indexing microwave switch Patent
[NASA-CASE-XNF-06507] c09 N71-23548
Rotary vane attenuator wherein rotor has orthogonally disposed resistive and dielectric cards
[NASA-CASE-NPO-11418-1] c14 N73-13420

NOBLE, R. M.
Solenoid construction Patent
[NASA-CASE-XNF-01951] c09 N70-41929

NOLA, P. J.
Positive dc to positive dc converter Patent
[NASA-CASE-XNF-14301] c09 N71-23188
Positive dc to negative dc converter Patent
[NASA-CASE-XNF-08217] c03 N71-23239
Transistor servo system including a unique differential amplifier circuit Patent
[NASA-CASE-XNF-05195] c10 N71-24861
Brushless direct current tachometer Patent
[NASA-CASE-MFS-20385] c09 N71-24904
Redundant speed control for brushless Hall effect motor
[NASA-CASE-MFS-20207-1] c09 N73-32107

Induction motor control system with voltage controlled oscillator circuit
[NASA-CASE-MFS-21465-1] c10 N73-32145
Variable frequency inverter for ac induction motors with torque, speed and braking control
[NASA-CASE-MFS-22088-1] c33 N75-15874

Tachometer
[NASA-CASE-MFS-23175-1] c35 N77-30436
Power factor control system for AC induction motors
[NASA-CASE-MFS-23280-1] c33 N78-10376
Three phase power factor controller
[NASA-CASE-MFS-25535-1] c33 N81-12330
Electrical power generating system
[NASA-CASE-MFS-24368-3] c33 N81-22280
Power factor control system for ac induction motors
[NASA-CASE-MFS-23988-1] c33 N81-27395

NORD, D. B.
Method of joining aluminum to stainless steel Patent
[NASA-CASE-MFS-07369] c15 N71-20443

NORDEN, B. E.
Hybrid holographic system using reflected and transmitted object beams simultaneously Patent
[NASA-CASE-MFS-20074] c16 N71-15565
Holographic thin film analyzer
[NASA-CASE-MFS-20823-1] c16 N73-30476

NOREEN, S. J.
Spherical shield Patent
[NASA-CASE-XNF-01855] c15 N71-28937

NORGEEN, C. T.
Colloid propulsion method and apparatus Patent
[NASA-CASE-XLE-00817] c28 N70-33265
Gas turbine combustor Patent
[NASA-CASE-LEW-10286-1] c28 N71-28915

NORR, C. L.
Sight switch using an infrared source and sensor Patent
[NASA-CASE-XMF-03934] c09 N71-22985

NORMAN, R. M.
Vibration isolation system using compression springs
[NASA-CASE-NPO-11012] c15 N72-11391
Expansible support means
[NASA-CASE-NPO-11059] c15 N72-17454
Zero torque gear head wrench
[NASA-CASE-NPO-13059-1] c37 N76-20480

NORTON, R. H.
Thruster maintenance system Patent
[NASA-CASE-MFS-20325] c28 N71-27095
Self-recording portable soil penetrometer
[NASA-CASE-MFS-20774] c14 N73-19420
Interferometer
[NASA-CASE-NPO-14448-1] c74 N81-29963

NORWOOD, J., JR.
Magnetically controlled plasma accelerator Patent
[NASA-CASE-XLA-00327] c25 N71-29184

NOSSEN, E. J.
Frequency measurement by coincidence detection with standard frequency
[NASA-CASE-MSC-14649-1] c33 N76-16331

NOVOTNY, J. E.
Ultrastable calibrated light source
[NASA-CASE-MSC-12293-1] c14 N72-27411

NUSBAUM, W. J.
Apparatus for absorbing and measuring power Patent
[NASA-CASE-XLE-00720] c14 N70-40201

OAKLEY, E. C.
RF-source resistance meters
[NASA-CASE-NPO-11291-1] c14 N73-30388

OBERSCHIEDT, M.
Flow test device
[NASA-CASE-XNS-04917] c14 N69-24257

OBLER, H. D.
Air conditioning system and component therefore distributing air flow from opposite directions
[NASA-CASE-GSC-11445-1] c31 N74-27902
Apparatus for supplying conditioned air at a substantially constant temperature and humidity
[NASA-CASE-GSC-12191-1] c31 N80-32583
Variable speed drive
[NASA-CASE-GSC-12643-1] c37 N81-24447

OBBAN, J. P.
Process for the preparation of polycarboranylphosphazenes

[NASA-CASE-ARC-11176-2] c27 N81-27271
OBRIEN, D. E., III
 Technique for recovery of voice data from heat
 damaged magnetic tape
 [NASA-CASE-MSC-14219-1] c32 N74-27612
OBRIEN, J. P.
 Carboranylclotriphosphazenes and their polymers
 [NASA-CASE-ARC-11176-1] c27 N80-21533
OCONEHE, B. J.
 Failure detection and control means for improved
 drift performance of a gimbaled platform system
 [NASA-CASE-MFS-23551-1] c04 N76-26175
OCONEHE, E. W.
 Condensate removal device for heat exchanger
 [NASA-CASE-MSC-14143-1] c77 N75-20139
OCONEHE, J. W.
 Fastener stretcher
 [NASA-CASE-GSC-11149-1] c15 N73-30457
ODELL, H. G.
 Dual latching solenoid valve Patent
 [NASA-CASE-XMS-05890] c09 N71-23191
ODONNELL, P. E.
 Corrosion resistant beryllium Patent
 [NASA-CASE-LEW-10327] c17 N71-33408
ODONNELL, T. J.
 Spherically-shaped rocket motor Patent
 [NASA-CASE-XMS-01897] c28 N70-35381
OEHTEL, G. K.
 Fast opening diaphragm Patent
 [NASA-CASE-XLA-03660] c15 N71-21060
 Measurement of time differences between luminous
 events Patent
 [NASA-CASE-XLA-01987] c23 N71-23976
OFARRELL, H. W.
 Solar cell module assembly jig
 [NASA-CASE-XGS-00829-1] c44 N79-19447
OFFIK, W. G.
 Emergency escape system Patent
 [NASA-CASE-XKS-02342] c05 N71-11199
OGDEN, H. P.
 Aerodynamic measuring device Patent
 [NASA-CASE-XLA-00481] c14 N70-36824
 Check valve assembly for a probe Patent
 [NASA-CASE-XLA-00128] c15 N70-37925
OGDEN, H. R.
 Low temperature aluminum alloy Patent
 [NASA-CASE-XMS-02786] c17 N71-20743
OGLE, J. S.
 Whole body measurement systems
 [NASA-CASE-MSC-13972-1] c52 N74-10975
OHLSON, J. E.
 System for interference signal nulling by
 polarization adjustment
 [NASA-CASE-NPO-13140-1] c32 N75-24982
 Conical scan tracking system employing a large
 antenna
 [NASA-CASE-NPO-14009-1] c32 N79-13214
OKANE, J. H.
 Pressure suit tie-down mechanism Patent
 [NASA-CASE-XMS-00784] c05 N71-12335
OKBAN, E. C.
 High-Q bandpass resonators utilizing bandstop
 resonator pairs
 [NASA-CASE-GSC-10990-1] c09 N73-26195
OKREPE, W. J.
 Head-up attitude display
 [NASA-CASE-ERC-10392] c21 N73-14692
OKELLY, K. P.
 Method of fluxless brazing and diffusion bonding
 of aluminum containing components
 [NASA-CASE-MSC-14435-1] c37 N76-18455
OLCOTT, J. W.
 Integrated lift/drag controller for aircraft
 [NASA-CASE-ARC-10456-1] c05 N75-12930
OLDBRIDGE, R. E.
 Reinforced metallic composites Patent
 [NASA-CASE-XLE-02428] c17 N70-33288
 Method of making fiber reinforced metallic
 composites Patent
 [NASA-CASE-XLE-00231] c17 N70-38198
 Tantalum modified ferritic iron base alloys
 [NASA-CASE-LEW-12095-1] c26 N78-16182
OLIVER, G. D.
 Scanning nozzle plating system
 [NASA-CASE-NPO-11758-1] c31 N74-23065
OLIVER, E. E.
 Multiple reflection conical microwave antenna
 [NASA-CASE-NPO-11661] c07 N73-14130
OLIVER, R. L.
 Apparatus for applying cover slides
 [NASA-CASE-NPO-10575] c03 N72-25019
OLLENDORF, S.
 Structural heat pipe
 [NASA-CASE-GSC-11619-1] c34 N75-12222
 Thermal control canister
 [NASA-CASE-GSC-12253-1] c34 N79-31523
OLLING, E. H.
 Radial module space station Patent
 [NASA-CASE-XMS-01906] c31 N70-41373
OLSAKEY, H. J.
 Laser camera and diffusion filter therefore Patent
 [NASA-CASE-NPO-10417] c16 N71-33410
OLSEN, W. A., JR.
 Reduced gravity liquid configuration simulator
 [NASA-CASE-XLE-02624] c12 N69-39988
 Hot wire liquid level detector for cryogenic
 fluids Patent
 [NASA-CASE-XLE-00454] c23 N71-17802
OLSON, B. T.
 Inlet deflector for jet engines Patent
 [NASA-CASE-XLE-00388] c28 N70-34788
OLTMANS, D. A.
 Matched thermistors for microwave power meters
 Patent
 [NASA-CASE-NPO-10348] c10 N71-12554
ONEIL, R. L.
 Particulate and aerosol detector
 [NASA-CASE-LAR-11434-1] c35 N76-22509
ONEILL, R. W.
 Monostable multivibrator with complementary NOR
 gates Patent
 [NASA-CASE-MSC-13492-1] c10 N71-28860
 Peak holding circuit for extremely narrow pulses
 [NASA-CASE-MSC-14129-1] c33 N75-18479
ORAN, W. A.
 Method and apparatus for shaping and enhancing
 acoustical levitation forces
 [NASA-CASE-MFS-25050-1] c71 N81-15767
 Containerless melting and rapid solidification
 apparatus and method
 [NASA-CASE-MFS-25305-1] c35 N81-16427
OREILLY, W. J.
 Portable environmental control system Patent
 [NASA-CASE-XMS-09632-1] c05 N71-11203
OREN, V. C.
 Fastener stretcher
 [NASA-CASE-GSC-11149-1] c15 N73-30457
ORILLION, A. G.
 Personal propulsion unit Patent
 [NASA-CASE-MFS-20130] c28 N71-27585
ORLIK, F. W.
 Pressure seal Patent
 [NASA-CASE-NPO-10796] c15 N71-27068
ORLOFF, E. L.
 Combined dual scatter, local oscillator laser
 Doppler velocimeter
 [NASA-CASE-ARC-10642-1] c36 N76-14447
 Rhomboid prism pair for rotating the plane of
 parallel light beams
 [NASA-CASE-ARC-11311-1] c74 N81-16882
ORMISTON, B. A.
 Hingeless helicopter rotor with improved stability
 [NASA-CASE-ARC-10807-1] c05 N77-17029
ORREB, J. W.
 Method and apparatus for detecting gross leaks
 Patent
 [NASA-CASE-ERC-10033] c14 N71-26672
OROURKE, T. E., JR.
 Sealing member and combination thereof and
 method of producing said sealing member Patent
 [NASA-CASE-XMS-01625] c15 N71-23022
ORTH, E. W.
 Process for producing dispersion strengthened
 nickel with aluminum Patent
 [NASA-CASE-XLE-06969] c17 N71-24142
 Method for alleviating thermal stress damage in
 laminates
 [NASA-CASE-LEW-12493-1] c24 N81-17170
 Method for alleviating thermal stress damage in
 laminates
 [NASA-CASE-LEW-12493-2] c24 N81-26179
OSHER, J. V.
 Miniature muscle displacement transducer
 [NASA-CASE-NPO-13519-1] c33 N76-19338
OSMUNDSON, J.
 Dually mode locked Nd:YAG laser
 [NASA-CASE-GSC-11746-1] c36 N75-19654

- OSTROFF, A. J.
Star image motion compensator
[NASA-CASE-LAR-10523-1] c14 N72-22444
- OSTROFF, J.
Rotary actuator
[NASA-CASE-NPO-10244] c15 N72-26371
- OSULLIVAN, W. J., JR.
Method and apparatus for shock protection Patent
[NASA-CASE-XLA-00482] c15 N70-36409
Self supporting space vehicle Patent
[NASA-CASE-XLA-00117] c31 N71-17680
Thermal control wall panel Patent
[NASA-CASE-XLA-01243] c33 N71-22792
Thermal control panel Patent
[NASA-CASE-XLA-07728] c33 N71-22890
- OTHMAN, T. E.
Safety-type locking pin
[NASA-CASE-MFS-18495] c15 N72-11385
- OTOSHI, T. Y.
Rotary vane attenuator wherein rotor has
orthogonally disposed resistive and dielectric
cards
[NASA-CASE-NPO-11418-1] c14 N73-13420
- OTTO, G. H.
Synthesis of superconducting compounds by
explosive compaction of powders
[NASA-CASE-MFS-20861-1] c18 N73-32437
- OUTLAW, R. A.
In situ transfer standard for ultrahigh vacuum
gage calibration
[NASA-CASE-LAR-10862-1] c35 N74-15092
- OWEN, R. B.
Collimated beam manifold and method for using
the same
[NASA-CASE-MFS-25312-1] c74 N80-34251
Dual laser optical system and method for
studying fluid flow
[NASA-CASE-MFS-25315-1] c36 N81-19440
- OWENS, L. J.
Magnetic electrical connectors for biomedical
percutaneous implants
[NASA-CASE-KSC-11030-1] c52 N77-25772
Rotational joint assembly for the prosthetic leg
[NASA-CASE-KSC-11004-1] c54 N77-30749
Ocean thermal plant
[NASA-CASE-KSC-11034-1] c44 N78-32542
Illumination control apparatus for compensating
solar light
[NASA-CASE-KSC-11010-1] c74 N79-12890
Prosthesis coupling
[NASA-CASE-KSC-11069-1] c52 N79-26772
- P**
- PACALA, T. J.
Charge transfer reaction laser with
preionization means
[NASA-CASE-NPO-13945-1] c36 N78-27402
Pulse switching for high energy lasers
[NASA-CASE-NPO-14556-1] c36 N79-21336
- PAGE, G. D., JR.
Sun direction detection system
[NASA-CASE-NPO-13722-1] c74 N77-22951
- PACIOREK, K. J. L.
Heat resistant polymers of oxidized
styrylphosphine
[NASA-CASE-MSC-14903-1] c27 N78-32256
Compound oxidized styrylphosphine
[NASA-CASE-MSC-14903-2] c27 N80-10358
Heat resistant polymers of oxidized
styrylphosphine
[NASA-CASE-MSC-14903-3] c27 N80-24438
Preparation of perfluorinated imidocyanidoximes
[NASA-CASE-ARC-11267-1] c23 N80-26386
Preparation of perfluorinated 1,2,4-oxadiazoles
[NASA-CASE-ARC-11267-2] c25 N80-26407
- PACKARD, R. D.
Semiconductor surface protection material
[NASA-CASE-ERC-10339-1] c18 N73-30532
- PACKER, P. H.
Adjustable securing base
[NASA-CASE-MSC-19666-1] c37 N78-17383
Variable contour securing system
[NASA-CASE-MSC-16270-1] c37 N78-27423
- PADILLA, D.
Method and apparatus for fluffing, separating,
and cleaning fibers
[NASA-CASE-LAR-11224-1] c37 N76-18456
- PAGEL, L. L.
Cooling system for high speed aircraft
[NASA-CASE-LAR-12406-1] c05 N81-26114
- PAIK, S. F.
Parametric microwave noise generator Patent
[NASA-CASE-XEB-11019] c09 N71-23598
- PAIK, W. W.
Apparatus for recovering matter adhered to a
host surface
[NASA-CASE-NPO-11213] c15 N73-20514
- PAINTER, J. H.
Anti-multipath digital signal detector
[NASA-CASE-LAR-11827-1] c32 N77-10392
- PALANDATI, C. F., JR.
Prevention of pressure build-up in
electrochemical cells Patent
[NASA-CASE-IGS-01419] c03 N70-41864
- PALMER, E. I.
Apparatus for testing a pressure responsive
instrument Patent
[NASA-CASE-XMF-04134] c14 N71-23755
- PALSINGH, S.
Anti-gravity device
[NASA-CASE-MFS-22758-1] c70 N75-26789
- PAN, F. H.
A dc-coupled noninverting one-shot Patent
[NASA-CASE-XNF-09450] c10 N71-18723
- PAOLINI, J. J.
Full flow with shut off and selective drainage
control valve Patent application
[NASA-CASE-ERC-10208] c15 N70-10867
- PAPILL, S. S.
Low viscosity magnetic fluid obtained by the
colloidal suspension of magnetic particles
Patent
[NASA-CASE-XLE-01512] c12 N70-40124
Liquid storage tank venting device for zero
gravity environment Patent
[NASA-CASE-XLE-01449] c15 N70-41646
Capacitor and method of making same Patent
[NASA-CASE-LEW-10364-1] c09 N71-13522
Fluid dispensing apparatus and method Patent
[NASA-CASE-XLB-01182] c27 N71-15635
Curved film cooling admission tube
[NASA-CASE-LEW-13174-1] c34 N81-12363
- PARDOE, C. T.
Telemetry synchronizer
[NASA-CASE-GSC-11868-1] c17 N76-22245
- PARISCHE, F.
Resistive anode image converter
[NASA-CASE-HQN-10876-1] c33 N76-27473
- PARK, J. J.
Method of making tubes Patent
[NASA-CASE-IGS-04175] c15 N71-18579
- PARKER, D. L.
Apparatus for use in examining the lattice of a
semiconductor wafer by X-ray diffraction
[NASA-CASE-MFS-23315-1] c76 N78-24950
- PARKER, G. L.
Elimination of frequency shift in a multiplex
communication system Patent
[NASA-CASE-XNP-01306] c07 N71-20814
High speed phase detector Patent
[NASA-CASE-XNP-01306-2] c09 N71-24596
Optical binocular scanning apparatus
[NASA-CASE-NPO-11002] c14 N72-22441
Hydraulic drain means for servo-systems
[NASA-CASE-NPO-10316-1] c37 N77-22479
- PARKER, J. A.
Intumescent paints Patent
[NASA-CASE-ARC-10099-1] c18 N71-15469
Modified polyurethane foams for fuel-fire Patent
[NASA-CASE-ARC-10098-1] c06 N71-24739
Flexible fire retardant foam
[NASA-CASE-ARC-10180-1] c28 N72-20767
Intumescent composition, foamed product prepared
therewith, and process for making same
[NASA-CASE-ARC-10304-1] c18 N73-26572
Flexible fire retardant polyisocyanate modified
neoprene foam
[NASA-CASE-ARC-10180-1] c27 N74-12814
Chromato-fluorographic drug detector
[NASA-CASE-ARC-10633-1] c25 N74-26947
Intumescent composition, foamed product prepared
therewith and process for making same
[NASA-CASE-ARC-10304-2] c27 N74-27037
Fiber modified polyurethane foam for ballistic
protection
[NASA-CASE-ARC-10714-1] c27 N76-15310

Transparent fire resistant polymeric structures
[NASA-CASE-ABC-10813-1] c27 N76-16230

Honeycomb-laminate composite structure
[NASA-CASE-ABC-10913-1] c24 N78-15180

Low density bismaleimide-carbon microballoon
composites
[NASA-CASE-ABC-11040-2] c24 N78-27184

Low density bismaleimide-carbon microballoon
composites
[NASA-CASE-ABC-11040-1] c24 N79-16915

Phosphorus-containing bisimide resins
[NASA-CASE-ABC-11321-1] c27 N81-27272

Resin composition, process for producing the
same, product produced therefrom and process
for producing said product
[NASA-CASE-ABC-11331-1] c27 N81-31363

Phosphorus-containing imide resins
[NASA-CASE-ABC-11368-1] c27 N81-31364

PARKER, L. C.
Safe-arm initiator Patent
[NASA-CASE-LAR-10372] c09 N71-18599

PARKER, O. J.
Despin weight release Patent
[NASA-CASE-XLA-00679] c15 N70-38601

Spacecraft separation system for spinning
vehicles and/or payloads Patent
[NASA-CASE-XLA-02132] c31 N71-10582

Flared tube strainer
[NASA-CASE-XLA-05056] c15 N72-11389

PARKER, R. J.
Method of improving the reliability of a rolling
element system Patent
[NASA-CASE-XLE-02999] c15 N71-16052

Low mass rolling element for bearings
[NASA-CASE-LEW-11087-1] c15 N73-30458

Method of making rolling element bearings
[NASA-CASE-LEW-11087-2] c37 N74-15128

Hollow rolling element bearings
[NASA-CASE-LEW-11087-3] c37 N74-21064

PARNLEY, R. T.
Aerodynamic protection for space flight vehicles
Patent
[NASA-CASE-INP-02507] c31 N71-17679

PARR, R. A.
Preparation of monotectic alloys having a
controlled microstructure by directional
solidification under dopant-induced interface
breakdown
[NASA-CASE-MFS-23816-1] c26 N80-23419

PARRA, G. T.
Angle detector
[NASA-CASE-ABC-11036-1] c35 N78-32395

PARSONS, W. E.
Electronic checkout system for space vehicles
Patent
[NASA-CASE-XKS-08012-2] c31 N71-15566

Percutaneous connector device
[NASA-CASE-KSC-10849-1] c52 N77-14738

PARTHASARATHY, S. P.
System and method for obtaining wide screen
Schlieren photographs
[NASA-CASE-NPO-14174-1] c74 N79-20856

System for detecting substructure microfractures
and method therefore
[NASA-CASE-NPO-14192-1] c39 N80-10507

System for plotting subsoil structure and method
therefor
[NASA-CASE-NPO-14191-1] c31 N80-32584

PARTSCH, V. H.
Purge device for thrust engines Patent
[NASA-CASE-XMS-04826] c28 N71-28849

PASCIUTTI, E. B.
Protection for energy conversion systems
[NASA-CASE-XGS-04808] c03 N69-25146

Inverter with means for base current shaping for
sweeping charge carriers from base region Patent
[NASA-CASE-XGS-06226] c10 N71-25950

A dc to ac to dc converter having transistor
synchronous rectifiers
[NASA-CASE-GSC-11126-1] c09 N72-25253

PASIERB, E. P.
GaAs solar detector using manganese as a doping
agent Patent
[NASA-CASE-XHP-01328] c26 N71-18064

PASSMAN, H. H.
Heat conductive resiliently compressible
structure for space electronics package
modules Patent
[NASA-CASE-MSC-12389] c33 N71-29052

PATE, W. E.
Color perception tester
[NASA-CASE-KSC-10278] c05 N72-16015

PATEL, B. C.
A method and technique for installing
light-weight fragile, high-temperature fiber
insulation
[NASA-CASE-MSC-16934-2] c37 N81-16468

PATON, W. J.
Flammability test chamber Patent
[NASA-CASE-KSC-10126] c11 N71-24985

PATTEE, H. E.
Attaching of strain gages to substrates
[NASA-CASE-FBC-10093-1] c35 N80-20560

PATTEN, C. W.
Method and apparatus for attaching physiological
monitoring electrodes Patent
[NASA-CASE-IFR-07658-1] c05 N71-26293

PATTERSON, J. C., JR.
Wingtip vortex dissipator for aircraft
[NASA-CASE-LAR-11645-1] c02 N77-10001

Wingtip vortex turbine
[NASA-CASE-LAR-12544-1] c07 N81-27096

PATTERSON, W. J.
Synthesis of siloxane-containing epoxy polymers
Patent
[NASA-CASE-MPS-13994-1] c06 N71-11240

Siloxane containing epoxide compounds
[NASA-CASE-MPS-13994-2] c06 N72-25148

Silphenylenesiloxane polymers having in-chain
perfluoroalkyl groups
[NASA-CASE-MPS-20979] c06 N72-25151

Polymerizable disilanolis having in-chain
perfluoroalkyl groups
[NASA-CASE-MPS-20979-2] c06 N73-32030

PAULI, P. A.
Attitude controls for VTOL aircraft Patent
[NASA-CASE-XAC-08972] c02 N71-20570

PAULKOVICH, J.
Apparatus for measuring current flow Patent
[NASA-CASE-XGS-02439] c14 N71-19431

Coulometer and third electrode battery charging
circuit Patent
[NASA-CASE-GSC-10487-1] c03 N71-24719

Non-contacting power transfer device
[NASA-CASE-GSC-12595-1] c33 N81-12331

Buck/boost regulator
[NASA-CASE-GSC-12360-1] c33 N81-19392

PAULL, S.
Variable frequency magnetic multivibrator Patent
[NASA-CASE-XGS-00458] c09 N70-38604

Variable frequency magnetic multivibrator Patent
[NASA-CASE-XGS-00131] c09 N70-38995

PAVLICS, P.
Resilient wheel Patent
[NASA-CASE-MPS-13929] c15 N71-27091

PAWLIK, E. V.
Plasma device feed system Patent
[NASA-CASE-XLE-02902] c25 N71-21694

Ion thruster with a combination keeper electrode
and electron baffle
[NASA-CASE-NFO-11880] c28 N73-24783

Sandblasting nozzle
[NASA-CASE-NPO-13823-1] c37 N81-25371

PEARSON, A. O.
Measurement of gas production of microorganisms
[NASA-CASE-LAR-11326-1] c35 N75-33368

PECHMAN, A.
Two-component ceramic coating for silica
insulation
[NASA-CASE-MSC-14270-1] c27 N76-22377

Three-component ceramic coating for silica
insulation
[NASA-CASE-MSC-14270-2] c27 N76-23426

PECK, S. E.
Voltage feed through apparatus having reduced
partial discharge
[NASA-CASE-GSC-12347-1] c33 N80-18286

PECKHAM, V. A., JR.
Sample collecting impact bit Patent
[NASA-CASE-XHP-01412] c15 N70-42034

PEDERSON, C. W.
Low distortion automatic phase control circuit
[NASA-CASE-MPS-21671-1] c33 N74-22885

PERLGRIN, H. L.
Shell side liquid metal boiler
[NASA-CASE-NFO-10831] c33 N72-20915

PERR, C. R.
Connector strips-positive, negative and T tabs

[NASA-CASE-XGS-01395] c03 N69-21539
PEGDEN, C. D.
 Multiple in-line docking capability for rotating space stations
 [NASA-CASE-MFS-20855-1] c15 N77-10112
PELCHAT, G. M.
 Adaptive polarization separation
 [NASA-CASE-LAR-12196-1] c33 N81-26358
PELLERIN, C. J., JR.
 Two axis fluxgate magnetometer Patent
 [NASA-CASE-GSC-10441-1] c14 N71-27325
PENQUE, H. J.
 Varactor high level mixer
 [NASA-CASE-XGS-02171] c09 N69-24324
PEOPLES, J. A.
 Multiway vortex valve system Patent
 [NASA-CASE-XNP-04709] c15 N71-15609
PERKINS, G. S.
 Detenting servomotor Patent
 [NASA-CASE-XNP-06936] c15 N71-24695
 Ball screw linear actuator
 [NASA-CASE-NPO-11222] c15 N72-25456
 Sun tracking solar energy collector
 [NASA-CASE-NPO-13921-1] c44 N79-14526
 Sandblasting nozzle
 [NASA-CASE-NPO-13823-1] c37 N81-25371
PERKINS, H.
 System for imposing directional stability on a rocket-propelled vehicle
 [NASA-CASE-MFS-21311-1] c20 N76-21275
PERKINS, P. J., JR.
 Cryogenic insulation system Patent
 [NASA-CASE-XLE-04222] c23 N71-22881
 Insulation system Patent
 [NASA-CASE-XLE-02647] c18 N71-23658
PERLMAN, M.
 Linear three-tap feedback shift register Patent
 [NASA-CASE-NPO-10351] c08 N71-12503
 Binary sequence detector Patent
 [NASA-CASE-XNP-05415] c08 N71-12505
 Digital function generator
 [NASA-CASE-NPO-11104] c08 N72-22165
 Feedback shift register with states decomposed into cycles of equal length
 [NASA-CASE-NPO-11082] c08 N72-22167
 Pseudonoise sequence generators with three tap linear feedback shift registers
 [NASA-CASE-NPO-11406] c08 N73-12175
 A n-ary linear feedback shift register with binary logic
 [NASA-CASE-NPO-11868] c10 N73-20254
 System for generating timing and control signals
 [NASA-CASE-NPO-13125-1] c33 N75-19519
 Nonlinear nonsingular feedback shift registers
 [NASA-CASE-NPO-13451-1] c33 N76-14373
PERLMUTTER, M.
 Device for directionally controlling electromagnetic radiation Patent
 [NASA-CASE-XLE-01716] c09 N70-40234
PERRY, C. L.
 Metabolic analyzer
 [NASA-CASE-MFS-21415-1] c52 N74-20728
PERRY, G. D.
 Zero gravity apparatus Patent
 [NASA-CASE-XNP-06515] c14 N71-23227
PERRY, J. C.
 System for a displaying at a remote station data generated at a central station and for powering the remote station from the central station
 [NASA-CASE-GSC-12411-1] c33 N81-14221
PERRY, W. E.
 Optical conversion method
 [NASA-CASE-MSC-12618-1] c74 N78-17865
PERSON, J. K.
 Bonding machine for forming a solar array strip
 [NASA-CASE-NPO-13652-2] c44 N79-24431
PESEK, C. F.
 Clamping assembly for inertial components Patent
 [NASA-CASE-XMS-02184] c15 N71-20813
 Circuit board package with wedge shaped covers
 [NASA-CASE-MFS-21919-1] c10 N73-25243
PESMAN, G. J.
 Shock absorbing support and restraint means Patent
 [NASA-CASE-XMS-01240] c05 N70-35152
PETERS, D. A.
 Hingeless helicopter rotor with improved stability
 [NASA-CASE-ARC-10807-1] c05 N77-17029

PETERS, H. E.
 Atomic standard with variable storage volume
 [NASA-CASE-GSC-11895-1] c35 N76-15436
PETERS, L., JR.
 Horn antenna having V-shaped corrugated slots
 [NASA-CASE-LAR-11112-1] c32 N76-15330
PETERS, P. M.
 Germanium coated microbridge and method
 [NASA-CASE-MFS-23274-1] c33 N78-13320
PETERS, R. L.
 CRT blanking and brightness control circuit
 [NASA-CASE-KSC-10647-1] c10 N72-31273
PETERS, R. W.
 Two component bearing Patent
 [NASA-CASE-XLA-00013] c15 N71-29136
PETERSEN, G. E.
 Potential heat exchange fluids for use in sulfuric acid vaporizers
 [NASA-CASE-NFO-15015-1] c25 N80-23394
 Enhancement of in vitro Guayule propagation
 [NASA-CASE-NFO-15213-1] c51 N81-29728
PETERSEN, H. L.
 Four phase logic systems
 [NASA-CASE-MSC-14240-1] c33 N75-14957
PETERSEN, H. W.
 Adjustable mount for a trihedral mirror Patent
 [NASA-CASE-XNP-08907] c23 N71-29123
PETERSON, E. W.
 Canopus detector including automotive gain control of photomultiplier tube Patent
 [NASA-CASE-XNP-03914] c21 N71-10771
PETERSON, M. C.
 Ultraviolet atomic emission detector
 [NASA-CASE-HQN-10756-1] c14 N72-25428
PETERSON, M. E., JR.
 Shrink-fit gas valve Patent
 [NASA-CASE-XGS-00587] c15 N70-35087
PETERSON, P. D.
 Portable environmental control system Patent
 [NASA-CASE-XMS-09632-1] c05 N71-11203
PETERSON, S. T.
 Meteoroid detector
 [NASA-CASE-LAR-10483-1] c14 N73-32327
PETERSON, V. S.
 Flow angle sensor and read out system Patent
 [NASA-CASE-XLE-04503] c14 N71-24864
 Solid state remote circuit selector switch
 [NASA-CASE-LEW-10387] c09 N72-22201
 Low level signal limiter
 [NASA-CASE-XLE-04791] c32 N74-22096
 Fine particulate capture device
 [NASA-CASE-LEW-11583-1] c35 N79-17192
PETERSON, W. A.
 Folded traveling wave maser structure Patent
 [NASA-CASE-XNP-05219] c16 N71-15550
 Superconducting magnet Patent
 [NASA-CASE-XNP-06503] c23 N71-29049
PETERSON, W. D.
 Automatic frequency discriminators and control for a phase-lock loop providing frequency preset capabilities Patent
 [NASA-CASE-XNP-08665] c10 N71-19467
PETERSEN, R. E.
 Medical subject monitoring systems
 [NASA-CASE-MSC-14180-1] c52 N76-14757
PETRASEK, D. W.
 Reinforced metallic composites Patent
 [NASA-CASE-XLE-02428] c17 N70-33288
 Method of making fiber reinforced metallic composites Patent
 [NASA-CASE-XLE-00231] c17 N70-38198
 Reinforced metallic composites Patent
 [NASA-CASE-XLE-00228] c17 N70-38490
 Method of making fiber composites
 [NASA-CASE-LEW-10424-2-2] c18 N72-25539
PETRICK, E. M.
 Variable thrust ion engine utilizing thermally decomposable solid fuel Patent
 [NASA-CASE-XNP-00923] c28 N70-36802
PETTY, S. M.
 Maser amplifier slow wave structure
 [NASA-CASE-NFO-15211-1] c36 N81-24425
PETYNIA, W. W.
 Space and atmospheric reentry vehicle Patent
 [NASA-CASE-XGS-00260] c31 N70-37924
 Space vehicle system
 [NASA-CASE-MSC-12561-1] c18 N76-17185
PETTON, J.
 Wideband heterodyne receiver for laser

communication system
[NASA-CASE-GSC-12053-1] c32 N77-28346

PEZDINTZ, G. F.
Method and apparatus for shock protection Patent
[NASA-CASE-XLA-00482] c15 N70-36409
Imidazopyrrolone/imide copolymers Patent
[NASA-CASE-XLA-08802] c06 N71-11238
Dosimeter for high levels of absorbed radiation
Patent
[NASA-CASE-XLA-03645] c14 N71-20430
Solid state thermal control polymer coating
Patent
[NASA-CASE-XLA-01745] c33 N71-28903

PFAPP, H.
Swivel support for gas bearings Patent
[NASA-CASE-XNP-07808] c15 N71-23812

PPIFFNER, H. J.
Bootstrap unloader Patent
[NASA-CASE-XNP-09768] c09 N71-12516

PPLIGER, H. O.
Spherical shield Patent
[NASA-CASE-XNP-01855] c15 N71-28937

PHILIPP, W. H.
Selective nickel deposition
[NASA-CASE-LEW-10965-1] c15 N72-25452
Production of pure metals
[NASA-CASE-LEW-10906-1] c25 N74-30502
Process for making anhydrous metal halides
[NASA-CASE-LEW-11860-1] c37 N76-18458
In situ self cross-linking of polyvinyl alcohol
battery separators
[NASA-CASE-LEW-12972-1] c44 N79-25481
In-situ cross linking of polyvinyl alcohol
[NASA-CASE-LEW-13135-2] c27 N81-24257
Cross-linked polyvinyl alcohol and method of
making same
[NASA-CASE-LEW-13101-2] c23 N81-29160
Alkaline battery containing a separator of a
cross-linked copolymer of vinyl alcohol and
unsaturated carboxylic acid
[NASA-CASE-LEW-13102-1] c44 N81-29531

PHILIPS, A. R.
Technique of duplicating fragile core
[NASA-CASE-XLA-07829] c15 N72-16329

PHILLIPS, W. H.
Method of cross-linking polyvinyl alcohol and
other water soluble resins
[NASA-CASE-LEW-13103-1] c27 N80-32516

PHILLIPS, B. L. S.
File card marker Patent
[NASA-CASE-XLA-02705] c08 N71-15908

PHILLIPS, E. C., JR.
Method of forming a wick for a heat pipe
[NASA-CASE-NPO-13391-1] c34 N76-27515

PHILLIPS, W. H.
Variable-geometry winged reentry vehicle Patent
[NASA-CASE-XLA-00241] c31 N70-37986
Station keeping of a gravity gradient stabilized
satellite Patent
[NASA-CASE-XLA-03132] c31 N71-22969
Rim inertial measuring system
[NASA-CASE-LAR-12052-1] c18 N81-29152
Solar powered aircraft
[NASA-CASE-LAR-12615-1] c05 N81-32138

PHILLIPS, W. H.
Shell side liquid metal boiler
[NASA-CASE-NPO-10831] c33 N72-20915
Cermet composition and method of fabrication
[NASA-CASE-NPO-13120-1] c27 N76-15311
High temperature oxidation resistant cermet
compositions
[NASA-CASE-NPO-13666-1] c27 N77-13217
Nuclear thermionic converter
[NASA-CASE-NPO-13121-1] c73 N77-18891
High temperature resistant cermet and ceramic
compositions
[NASA-CASE-NPO-13690-1] c27 N78-19302
High temperature resistant cermet and ceramic
compositions
[NASA-CASE-NPO-13690-2] c27 N79-14213
Sandblasting nozzle
[NASA-CASE-NPO-13823-1] c37 N81-25371

PHILIGER, G. A., JR.
Separation simulator Patent
[NASA-CASE-XKS-04631] c10 N71-23663
Internal work light Patent
[NASA-CASE-XKS-05932] c09 N71-26787
Universal environment package with sectional
component housing

[NASA-CASE-KSC-10031] c15 N72-22486
Pressurized lighting system
[NASA-CASE-KSC-10644] c09 N72-27227

PIASECKI, L. B.
Apparatus and method for control of a solid
fueled rocket vehicle Patent
[NASA-CASE-XNP-00217] c28 N70-38181

PICCILO, G. L.
Flavin coenzyme assay
[NASA-CASE-GSC-10565-1] c06 N72-25149
Method of detecting and counting bacteria in
body fluids
[NASA-CASE-GSC-11092-2] c04 N73-27052
Automatic instrument for chemical processing to
detect microorganisms in biological samples by
measuring light reactions
[NASA-CASE-GSC-11169-2] c05 N73-32011
Method of detecting and counting bacteria
[NASA-CASE-GSC-11917-2] c51 N76-29891
Application of luciferase assay for ATP to
antimicrobial drug susceptibility
[NASA-CASE-GSC-12039-1] c51 N77-22794
Rapid, quantitative determination of bacteria in
water
[NASA-CASE-GSC-12158-1] c51 N78-22585
Determination of antimicrobial susceptibilities
on infected urines without isolation
[NASA-CASE-GSC-12046-1] c52 N79-14750

PIERCE, R. M.
Propellant grain for rocket motors Patent
[NASA-CASE-XGS-03556] c27 N70-35534

PILLA, F. E. C.
Charge injection method and apparatus of
producing large area electrets
[NASA-CASE-MFS-23186-2] c24 N78-25137

PINCKNEY, E. R.
System for monitoring the presence of neutrals
in a stream of ions Patent
[NASA-CASE-XNP-02592] c24 N71-20518

PINCKNEY, S. Z.
Static pressure probe
[NASA-CASE-LAR-11552-1] c35 N76-14429

PINCUS, B. E.
Scanning aspect sensor employing an apertured
disc and a commutator
[NASA-CASE-XGS-08266] c14 N69-27432

PINKEL, I. I.
Reduced gravity liquid configuration simulator
[NASA-CASE-XLE-02624] c12 N69-39988

PINSON, G. T.
Guide for a typewriter
[NASA-CASE-MFS-15218-1] c37 N77-19457

PIPPEN, D. L.
High voltage pulse generator Patent
[NASA-CASE-MSC-12178-1] c09 N71-13518

PITELLI, E. E.
Transverse piezoresistance and pinch effect
electromechanical transducers Patent
[NASA-CASE-ERC-10088] c26 N71-25490

PITTS, D. E.
Method for manufacturing mirrors in zero gravity
environment
[NASA-CASE-MSC-12611-1] c12 N76-15189

PITTS, F. L.
Electronic strain-level counter
[NASA-CASE-LAR-10756-1] c32 N73-26910

PITTS, W. C.
Two force component measuring device Patent
[NASA-CASE-XAC-04886-1] c14 N71-20439

PIVIBOTTO, T. J.
Inert gas metallic vapor laser
[NASA-CASE-NFO-13449-1] c36 N75-32441
High power metallic halide laser
[NASA-CASE-NPO-14782-1] c36 N80-18381
Method and apparatus for convection control of
metallic halide vapor density in a metallic
halide laser
[NASA-CASE-NPO-15021-1] c36 N80-20574

PIZZECH, D. E.
Connector
[NASA-CASE-LAR-11709-1] c37 N76-27567

PLAKAS, C. J.
Firefly pump-metering system
[NASA-CASE-GSC-10218-1] c15 N72-21465

FLANODON, J. A., JR.
Conically shaped cavity radiometer with a dual
purpose cone winding Patent
[NASA-CASE-XNP-09701] c14 N71-26475

PLANOWSKI, S. C.
Traversing probe Patent
[NASA-CASE-XPR-02007] c12 N71-24692

PLATT, P. K.
Cryogenic connector for vacuum use Patent
[NASA-CASE-IGS-02441] c15 N70-41629

PLAZEK, D. J.
Instrument for measuring torsional creep and recovery Patent
[NASA-CASE-XLE-01481] c14 N71-10781

PLEASANTS, J. E.
Inflatable support structure Patent
[NASA-CASE-XLA-01731] c32 N71-21045
Vortex breech high pressure gas generator
[NASA-CASE-LAR-10549-1] c31 N73-13898

PLITT, K. F.
Spacecraft battery seals
[NASA-CASE-IGS-03864] c15 N69-24320

PODGOBORSKI, T. J.
Method of forming shrink-fit compression seal
[NASA-CASE-LAR-11563-1] c37 N77-23482

POESCHEL, R. L.
Ion thruster
[NASA-CASE-LEW-10770-1] c28 N72-22770

POGORZELSKI, P. S.
Apparatus for welding sheet material
[NASA-CASE-XMS-01330] c37 N75-27376

POHL, R. G.
Two-step rocket engine bipropellant valve Patent
[NASA-CASE-XMS-04890-1] c15 N70-22192

POHL, J. G.
Three-dimensional tracking solar energy concentrator and method for making same
[NASA-CASE-NPO-13736-1] c44 N77-32583
Portable linear-focused solar thermal energy collecting system
[NASA-CASE-NPO-13734-1] c44 N78-10554

POHN, A. V.
Magnetometer with a miniature transducer and automatic scanning
[NASA-CASE-LAR-11617-2] c35 N78-32397

POLBANUS, R. C.
Variable sweep wing configuration Patent
[NASA-CASE-XLA-00230] c02 N70-33255
Variable sweep aircraft wing Patent
[NASA-CASE-XLA-00350] c02 N70-38011
Variable sweep aircraft Patent
[NASA-CASE-XLA-03659] c02 N71-11041

POLHEMUS, J. L.
Condition sensor system and method
[NASA-CASE-MSC-14805-1] c54 N78-32720
Pulse transducer with artifact signal attenuator
[NASA-CASE-FRC-11012-1] c52 N80-23969

POLLACK, I.
Etching of aluminum for bonding Patent
[NASA-CASE-XMF-02303] c17 N71-23828
Dye penetrant for surfaces subsequently contacted by liquid oxygen Patent
[NASA-CASE-XMF-02221] c18 N71-27170

POLLACK, J. L.
High powered arc electrodes
[NASA-CASE-LEW-11162-1] c33 N74-12913

POLLARD, R. A.
Rescue litter flotation assembly Patent
[NASA-CASE-XMS-04170] c05 N71-22748

POLLOCK, G. E.
Gas chromatograph injection system
[NASA-CASE-ARC-10344-2] c35 N75-26334

POLSTORFF, W. K.
Simulator method and apparatus for practicing the mating of an observer-controlled object with a target
[NASA-CASE-MFS-23052-2] c74 N79-13855

POOL, S. L.
Medical subject monitoring systems
[NASA-CASE-MSC-14180-1] c52 N76-14757

POOLE, B. D., JR.
Miniature spectrally selective dosimeter
[NASA-CASE-LAR-12469-1] c35 N81-12388

POPE, A. B.
Zero gravity separator Patent
[NASA-CASE-XLE-00586] c15 N71-15968

POPE, J. B.
Miniature ingestible telemeter devices to measure deep-body temperature
[NASA-CASE-ARC-10583-1] c52 N76-25894

PORE, S. L.
Low gravity phase separator
[NASA-CASE-MSC-14773-1] c35 N78-12390

POPICK, H.
Laser apparatus for removing material from rotating objects Patent
[NASA-CASE-MFS-11279] c16 N71-20400

POPIBSKI, Z.
Automotive absorption air conditioner utilizing solar and motor waste heat
[NASA-CASE-NPO-15183] c44 N80-29843

POPMA, D. C.
Recovery of potable water from human wastes in below-G conditions Patent
[NASA-CASE-XLA-03213] c05 N71-11207

PORADEK, J. C.
Process for conditioning tanned sharkskin and articles made therefrom Patent
[NASA-CASE-XMS-09691-1] c18 N71-15545
Simultaneous treatment of SO₂ containing stack gases and waste water
[NASA-CASE-MSC-16258-1] c45 N79-12584

PORTER, E. E.
Spray coating apparatus having a rotatable workpiece holder
[NASA-CASE-ARC-11110-1] c37 N78-32434

PORTER, E. E.
Liquid rocket system Patent
[NASA-CASE-XNP-00610] c28 N70-36910
Zero gravity starting means for liquid propellant motors Patent
[NASA-CASE-XNP-01390] c28 N70-41275
Force-balanced, throttle valve Patent
[NASA-CASE-NPO-10808] c15 N71-27432

PORTER, W. A.
Apparatus for use in examining the lattice of a semiconductor wafer by X-ray diffraction
[NASA-CASE-MFS-23315-1] c76 N78-24950

PORTNOY, W. A.
Insulated electrocardiographic electrodes
[NASA-CASE-MSC-14339-1] c05 N75-24716

POSCHENRIEDER, W. P.
Analytical photoionization mass spectrometer with an argon gas filter between the light source and monochromator Patent
[NASA-CASE-LAR-10180-1] c06 N71-13461

POSEY, D. L.
Static pressure orifice system testing method and apparatus
[NASA-CASE-LAR-12269-1] c35 N80-18358

POSSEKUS, A. C.
An improved synthesis of 2, 4, 8, 10-tetroxaspiro (5.5)undecane
[NASA-CASE-ARC-11243-1] c27 N79-30375
Improved synthesis of polyformals
[NASA-CASE-ARC-11244-1] c27 N79-30376
An improved synthesis of 2, 4, 8, 10-tetroxaspiro (5.5) undecane
[NASA-CASE-ARC-11243-2] c23 N80-31472

POSNER, E. C.
Phase-locked loop with sideband rejecting properties Patent
[NASA-CASE-XNP-02723] c07 N70-41680
Data compressor Patent
[NASA-CASE-XNP-04067] c08 N71-22707
Apparatus for deriving synchronizing pulses from pulses in a single channel PCM communications system
[NASA-CASE-NPO-11302-1] c07 N73-13149
Method and apparatus for a single channel digital communications system
[NASA-CASE-NPO-11302-2] c32 N74-10132

POSTMA, E. W.
Thrust measurement
[NASA-CASE-XMS-05731] c35 N75-29382

POTKATE, W. B.
Multiparameter vision testing apparatus
[NASA-CASE-MSC-13601-2] c54 N75-27759

POTTER, A. E., JR.
Multispectral imaging system
[NASA-CASE-MSC-12404-1] c23 N73-13661

POTTER, L. B.
Thermocouple installation
[NASA-CASE-NPO-13540-1] c35 N77-14409

POTTER, E. E.
Method and apparatus for battery charge control Patent
[NASA-CASE-IGS-05432] c03 N71-19438

POTTER, P. D.
Casagrainian antenna subreflector flange for suppressing ground noise Patent
[NASA-CASE-XNP-00683] c09 N70-35425

Dual mode horn antenna Patent
[NASA-CASE-XNP-01057] c07 N71-15907

Dichroic plate
[NASA-CASE-NPO-13506-1] c35 N76-15435

POUCHOT, W. D.
Self-adjusting multisegment, deployable, natural
circulation radiator Patent
[NASA-CASE-XHQ-03673] c33 N71-29046

POVINELLI, L. A.
Burning rate control of solid propellants Patent
[NASA-CASE-XLE-03494] c27 N71-21819

POWELL, C. A., JR.
Instrument for measuring the dynamic behavior of
liquids Patent
[NASA-CASE-XLA-05541] c12 N71-26387

POWELL, J. A.
Process for fabricating SiC semiconductor devices
[NASA-CASE-LEW-12094-1] c76 N76-25049

POWELL, J. D.
Iodine generator for reclaimed water purification
[NASA-CASE-MSC-14632-1] c54 N78-14784

POWELL, W. B.
Thermocouple installation
[NASA-CASE-NPO-13540-1] c35 N77-14409

POWELL, W. R., JR.
Target acquisition antenna
[NASA-CASE-GSC-10064-1] c10 N72-22235

POWER, J. L.
Ion beam thruster shield
[NASA-CASE-LEW-12082-1] c20 N77-10148

POWERS, E. I.
Thermal control system for a spacecraft modular
housing
[NASA-CASE-GSC-11018-1] c31 N73-36829

POZSONY, E. R.
Apparatus and method for skin packaging articles
[NASA-CASE-MFS-20855] c15 N73-27405

PRASTHOFFER, W. P.
Controlled overspray spray nozzle
[NASA-CASE-MFS-25139-1] c34 N80-20528

PRESCOTT, W. A.
Liquid-gas separation system Patent
[NASA-CASE-XMS-01624] c15 N70-40062

PRESLEY, L. L.
Measurement of plasma temperature and density
using radiation absorption
[NASA-CASE-ARC-10598-1] c75 N74-30156

PRESTON, G. M.
Electronic checkout system for space vehicles
Patent
[NASA-CASE-XKS-08012-2] c31 N71-15566

PRESTON, G. M.
Satellite communication system Patent
[NASA-CASE-XNP-02389] c07 N71-28900

PRICE, A. G.
Attitude sensor
[NASA-CASE-LAR-10586-1] c19 N74-15089

PRICE, H. W.
Gravity gradient attitude control system Patent
[NASA-CASE-GSC-10555-1] c21 N71-27324

PRICE, P.
Apparatus for establishing flow of a fluid mass
having a known velocity
[NASA-CASE-MFS-21424-1] c34 N74-27730

PRICE, S. B.
Surface roughness detector Patent
[NASA-CASE-XLA-00203] c14 N70-34161

PRIDE, J. D., JR.
Remote controlled tubular disconnect Patent
[NASA-CASE-XLA-01396] c03 N71-12259

PRIEBE, G. W.
Relief container
[NASA-CASE-XMS-06761] c05 N69-23192

PRIOLETTI, J. A.
Inductive liquid level detection system Patent
[NASA-CASE-XLE-01609] c14 N71-10500

PRITCHARD, E. B.
Orbital and entry tracking accessory for globes
[NASA-CASE-LAR-10626-1] c19 N74-21015

PRITCHARD, E. O.
Reduction of nitric oxide emissions from a
combustor
[NASA-CASE-ARC-10814-2] c07 N80-26298

PROCH, G. E.
Digital transmitter for data bus communications
system
[NASA-CASE-MSC-14558-1] c32 N75-21486

Low distortion receiver for bi-level baseband
PCM waveforms

[NASA-CASE-MSC-14557-1] c32 N76-16249

PROEMSEY, J. H.
Method for making a heat insulating and ablative
structure
[NASA-CASE-XMS-01108] c15 N69-24322

PROFFIT, R. L.
Hydrogen fire detection system with logic
circuit to analyze the spectrum of temporal
variations of the optical spectrum
[NASA-CASE-MFS-13130] c10 N72-17173

PROGAR, D. J.
Process for applying black coating to metals
Patent
[NASA-CASE-XLA-06199] c15 N71-24875

Polyimide adhesives
[NASA-CASE-LAR-11397-1] c27 N75-29263

Polyimide adhesives
[NASA-CASE-LAR-12181-1] c27 N78-17205

PROK, G. M.
Apparatus for making a metal slurry product Patent
[NASA-CASE-XLE-00010] c15 N70-33382

PROKOPIUS, P. B.
Flow measuring apparatus
[NASA-CASE-LEW-12078-1] c35 N75-30503

PRUETT, B. J.
Apparatus for testing a pressure responsive
instrument Patent
[NASA-CASE-XMF-04134] c14 N71-23755

PRUETT, E. C.
Satellite retrieval system
[NASA-CASE-MFS-25403-1] c18 N81-24164

PRYOR, D. E.
Inflatable transpiration cooled nozzle
[NASA-CASE-MFS-20619] c28 N72-11708

PRYOR, P. P., JR.
Computerized system for translating a torch head
[NASA-CASE-MFS-23620-1] c37 N79-10421

PRZYBYSEWSKI, J. S.
Method and apparatus for sputtering utilizing an
apertured electrode and a pulsed substrate bias
[NASA-CASE-LEW-10920-1] c17 N73-24569

PSARRAS, T.
Perfluoroalkyl polytriazines containing pendent
iododifluoromethyl groups
[NASA-CASE-ARC-11241-1] c25 N81-14016

PUCCINELLI, A. A.
Three-axis controller Patent
[NASA-CASE-XAC-01404] c05 N70-41581

Transfer valve Patent
[NASA-CASE-XAC-01158] c15 N71-23051

PUCILLO, G. L.
Integrated thermoelectric generator/space
antenna combination
[NASA-CASE-XER-09521] c09 N72-12136

PULLING, B. C.
Space suit
[NASA-CASE-MSC-12609-1] c05 N73-32012

PURCELL, T. H., JR.
Electric storage battery
[NASA-CASE-NFO-11021] c03 N72-20032

PURGOLD, G. C.
Automated syringe sampler
[NASA-CASE-LAR-12308-1] c35 N81-29407

PUTNAM, D. P.
Electrolytic cell structure
[NASA-CASE-LAR-11042-1] c33 N75-27252

Q

QADER, S. A.
Solar-heated fluidized bed gasification system
[NASA-CASE-NPO-15071-1] c44 N80-24747

QUATTROME, P. D.
Method for producing fiber reinforced metallic
composites Patent
[NASA-CASE-XLE-03925] c18 N71-22894

Gas purged dry box glove Patent
[NASA-CASE-XLE-02531] c05 N71-23080

Process for producing dispersion strengthened
nickel with aluminum Patent
[NASA-CASE-XLE-06969] c17 N71-24142

Method of producing refractory composites
containing tantalum carbide, hafnium carbide,
and hafnium boride Patent
[NASA-CASE-XLE-03940] c18 N71-26153

Refractory metal base alloy composites
[NASA-CASE-XLE-03940-2] c17 N72-28536

QUATTROME, P. D.
Exposure system for animals Patent

[NASA-CASE-XAC-05333] c11 N71-22875
QUINN, R. B.
 Maser for frequencies in the 7-20 GHz range
 [NASA-CASE-NPO-11437] c16 N72-28521
 Dielectric-loaded waveguide circulator for
 cryogenically cooled and cascaded maser
 waveguide structures
 [NASA-CASE-NPO-14254-1] c36 N80-18372
 Maser amplifier slow wave structure
 [NASA-CASE-NPO-15211-1] c36 N81-24425

R

RADNOSKY, M. I.
 Life raft Patent
 [NASA-CASE-XMS-00863] c05 N70-34857
 Shock absorbing support and restraint means Patent
 [NASA-CASE-XMS-01240] c05 N70-35152
 Life preserver Patent
 [NASA-CASE-XMS-00864] c05 N70-36493
 Inflatable radar reflector unit Patent
 [NASA-CASE-XMS-00893] c07 N70-40063
 Life raft stabilizer
 [NASA-CASE-MSC-12393-1] c02 N73-26006
 High visibility air sea rescue panel
 [NASA-CASE-MSC-12564-2] c03 N78-25070
RAGGIO, C. W., JR.
 Steerable solid propellant rocket motor Patent
 [NASA-CASE-XNP-00234] c28 N70-38645
RAIBERT, R.
 Tactile sensing system
 [NASA-CASE-NPO-15094-1] c33 N81-16386
RAINEY, R. W.
 High speed flight vehicle control Patent
 [NASA-CASE-XLA-08967] c02 N71-27088
RAINWATER, L. L.
 Collapsible antenna boom and transmission line
 Patent
 [NASA-CASE-MFS-20068] c07 N71-27191
RAMEY, R. L.
 Depositing semiconductor films utilizing a
 thermal gradient
 [NASA-CASE-XKS-04614] c15 N69-21460
 Active microwave irises and windows
 [NASA-CASE-LAR-10513-1] c07 N72-25170
 Thin film microwave iris
 [NASA-CASE-LAR-10511-1] c09 N72-25172
RAMME, F. B.
 Flexible conductive disc electrode Patent
 [NASA-CASE-FRC-10029] c09 N71-24618
 Method of removing insulated material from
 insulated wires
 [NASA-CASE-FRC-10038] c15 N72-20444
 Method of making dry electrodes
 [NASA-CASE-FRC-10029-2] c05 N72-25121
RAMOHALLI, K. B. R.
 Silicone containing solid propellant
 [NASA-CASE-NFO-14477-1] c28 N80-28536
RANDALL, J. C.
 Attitude control for spacecraft Patent
 [NASA-CASE-XNP-02982] c31 N70-41855
RANEY, J. P.
 Buoyant anti-slosh system Patent
 [NASA-CASE-XLA-04605] c32 N71-16106
RAO, D. H.
 Aerodynamic side-force alleviator means
 [NASA-CASE-LAR-12326-1] c02 N81-14968
 Leading edge vortex flaps for drag reduction
 [NASA-CASE-LAR-12750-1] c02 N81-19016
RAPOSA, F. L.
 Parasitic suppressing circuit
 [NASA-CASE-ERC-10403-1] c10 N73-26228
 Transformer regulated self-stabilizing chopper
 [NASA-CASE-XGS-09186] c33 N78-17295
RAPOZA, E. J.
 Reversible current control apparatus Patent
 [NASA-CASE-XLA-09371] c10 N71-16724
RASMUSSEN, R. P.
 Transparent switchboard
 [NASA-CASE-MSC-13746-1] c10 N73-32143
RASQUIN, J. R.
 Angular measurement system Patent
 [NASA-CASE-XMF-00447] c14 N70-33179
 Electro-optical alignment control system Patent
 [NASA-CASE-XMF-00908] c14 N70-40238
 Laser coolant and ultraviolet filter
 [NASA-CASE-MFS-20180] c16 N72-12440
 Underwater space suit pressure control regulator
 [NASA-CASE-MFS-20332] c05 N72-20097

Apparatus for making diamonds
 [NASA-CASE-MFS-20698] c15 N72-20446
 High temperature furnace for melting
 materials in space
 [NASA-CASE-MFS-20710] c11 N72-23215
 Process for making diamonds
 [NASA-CASE-MFS-20698-2] c15 N73-19457
 Underwater space suit pressure control regulator
 [NASA-CASE-MFS-20332-2] c05 N73-25125
 Digital computing cardiometer
 [NASA-CASE-MFS-20284-1] c52 N74-12778
RASSWILLER, G. G.
 Adaptive polarization separation
 [NASA-CASE-LAR-12196-1] c33 N81-26358
RATAJCZAK, A. P.
 Solar cell shingle
 [NASA-CASE-LEW-12587-1] c44 N77-31601
RATCLIFF, L. P.
 Latch mechanism
 [NASA-CASE-MSC-12549-1] c37 N74-27903
RATZ, T. J.
 Method and apparatus for supercooling and
 solidifying substances
 [NASA-CASE-MFS-25242-1] c35 N81-24413
RAVAS, R. J.
 Transistor drive regulator Patent
 [NASA-CASE-LEW-10233] c10 N71-27126
RAVENHILL, R.
 Platform for a swing root turbomachinery blade
 [NASA-CASE-LEW-12312-1] c07 N77-32148
 Impact absorbing blade mounts for variable pitch
 blades
 [NASA-CASE-LEW-12313-1] c37 N78-10468
RAWSON, J.
 Display research collision warning system
 [NASA-CASE-HQN-10703] c21 N73-13643
RAY, W. L.
 Remote fire stack igniter
 [NASA-CASE-MFS-21675-1] c25 N74-33378
RAYBORN, G., H.
 A low energy electron magnetometer
 [NASA-CASE-LAR-12706-1] c35 N81-19428
RAYLE, W. D.
 Electric propulsion engine test chamber Patent
 [NASA-CASE-XLE-00252] c11 N70-34844
READ, P. G.
 Backpack carrier Patent
 [NASA-CASE-LAR-10056] c05 N71-12351
READ, W. S.
 Silent emergency alarm system for schools and
 the like
 [NASA-CASE-NFO-11307-1] c10 N73-30205
 Tool for use in lifting pin supported objects
 [NASA-CASE-NFO-13157-1] c37 N74-32918
READER, A. P.
 Method and apparatus for making curved
 reflectors Patent
 [NASA-CASE-XLE-08917] c15 N71-15597
 Apparatus for making curved reflectors Patent
 [NASA-CASE-XLE-08917-2] c15 N71-24836
READER, P. D.
 Ion thruster cathode
 [NASA-CASE-XLE-07087] c06 N69-39889
 Electrostatic ion engine having a permanent
 magnetic circuit Patent
 [NASA-CASE-XLE-01124] c28 N71-14043
 Electrostatic ion rocket engine Patent
 [NASA-CASE-XLE-02066] c28 N71-15661
REAN, L. W.
 Diesel engine catalytic combustor system
 [NASA-CASE-LEW-12995-1] c37 N80-26659
RECHTER, H. L.
 Lightweight refractory insulation and method of
 preparing the same Patent
 [NASA-CASE-XMF-05279] c18 N71-16124
REDDING, A. H.
 Self-adjusting multisegment, deployable, natural
 circulation radiator Patent
 [NASA-CASE-XHQ-03673] c33 N71-29046
REDMON, J. W.
 Air bearing assembly for curved surfaces
 [NASA-CASE-MFS-20423] c15 N72-11388
REECE, O. Y.
 Low temperature flexure fatigue cryostat Patent
 [NASA-CASE-XMF-02964] c14 N71-17659
 Horizontal cryostat for fatigue testing Patent
 [NASA-CASE-XMF-10968] c14 N71-24234
 Synthesis of superconducting compounds by
 explosive compaction of powders

[NASA-CASE-MFS-20861-1] c18 N73-32437
REED, A. E.
 High power-high voltage waterload Patent
 [NASA-CASE-XNP-05381] c09 N71-26842
REED, J. H., JR.
 Instrument for use in performing a controlled
 Valsalva maneuver Patent
 [NASA-CASE-XMS-01615] c05 N70-41329
REED, L.
 Method of forming ceramic to metal seal Patent
 [NASA-CASE-XNP-01263-2] c15 N71-26312
REED, R. D.
 Improved Sun-sensing guidance system for
 high-altitude aircraft
 [NASA-CASE-FRC-11052-1] c04 N80-20249
 Method for observing the features characterizing
 the surface of a land mass
 [NASA-CASE-FRC-11013-1] c43 N81-17499
REED, W. A., III
 Decoupler pylon: wing/store flutter suppressor
 [NASA-CASE-LAR-12468-1] c08 N80-22359
REED, W. H., III
 Test unit free-flight suspension system Patent
 [NASA-CASE-XLA-00939] c11 N71-15926
 Viscous-pendulum-damper Patent
 [NASA-CASE-XLA-02079] c12 N71-16894
 Viscous pendulum damper Patent
 [NASA-CASE-LAR-10274-1] c14 N71-17626
 Suspended mass impact damper Patent
 [NASA-CASE-LAR-10193-1] c15 N71-27146
REESE, P. B.
 Pressure limiting propellant actuating system
 [NASA-CASE-MSC-18179-1] c20 N80-18097
REGNIER, W. W.
 Passive propellant system
 [NASA-CASE-MFS-23642-2] c20 N78-27176
 Passive propellant system
 [NASA-CASE-MFS-23642-1] c20 N80-10278
REHAGE, J. R.
 Pulse counting circuit which simultaneously
 indicates the occurrence of the nth pulse Patent
 [NASA-CASE-XMP-00906] c09 N70-41655
REIBER, J. H. C.
 Contour detector and data acquisition system for
 the left ventricular outline
 [NASA-CASE-ARC-10985-1] c52 N79-10724
REID, H. J. E., JR.
 Dynamic precession damper for spin stabilized
 vehicles Patent
 [NASA-CASE-XLA-01989] c21 N70-34295
 Attitude orientation of spin-stabilized space
 vehicles Patent
 [NASA-CASE-XLA-00281] c21 N70-36943
REID, H., JR.
 Pulse width inverter Patent
 [NASA-CASE-MFS-10068] c10 N71-25139
 Induction motor control system with voltage
 controlled oscillator circuit
 [NASA-CASE-MFS-21465-1] c10 N73-32145
 Coal-shale interface detection system
 [NASA-CASE-MFS-23720-2] c43 N80-14423
 Coal-shale interface detector
 [NASA-CASE-MFS-23720-1] c43 N80-23711
REID, H. A.
 Zirconium carbide as an electrocatalyst for the
 chromous/chromic redox couple
 [NASA-CASE-LEW-13246-1] c25 N81-26203
REID, H. S.
 Conical scan tracking system employing a large
 antenna
 [NASA-CASE-NPO-14009-1] c32 N79-13214
REID, R.
 Spacecraft docking and alignment system
 [NASA-CASE-MSC-12559-1] c18 N76-14186
REID, W. J.
 Digital frequency discriminator Patent
 [NASA-CASE-MFS-14322] c08 N71-18692
REILLY, M. B.
 Satellite personal communications system
 [NASA-CASE-NPO-14480-1] c32 N80-20448
REILLY, T. H.
 Medical diagnosis system and method with
 multispectral imaging
 [NASA-CASE-NPO-14402-1] c52 N81-27783
REINHARDT, G.
 Gas purged dry box glove Patent
 [NASA-CASE-XLB-02531] c05 N71-23080
REINHARDT, V. S.
 Time domain phase measuring apparatus
 [NASA-CASE-GSC-12228-1] c33 N79-10338
 External bulb variable volume maser
 [NASA-CASE-GSC-12334-1] c36 N79-14362
 High stability buffered phase comparator
 [NASA-CASE-GSC-12645-1] c33 N81-31482
 High stability amplifier
 [NASA-CASE-GSC-12646-1] c33 N81-32391
REINHOLD, R. W.
 Circuit breaker utilizing magnetic latching
 relays Patent
 [NASA-CASE-MSC-11277] c09 N71-29008
REINISCH, R. F.
 Ultraviolet and thermally stable polymer
 compositions
 [NASA-CASE-ARC-10592-1] c27 N74-21156
 Ultraviolet and thermally stable polymer
 compositions
 [NASA-CASE-ARC-10592-2] c27 N76-32315
REINITZ, K.
 Extended area semiconductor radiation detectors
 and a novel readout arrangement Patent
 [NASA-CASE-IGS-03230] c14 N71-23401
REISS, D. A.
 Method and apparatus for shaping and enhancing
 acoustical levitation forces
 [NASA-CASE-MFS-25050-1] c71 N81-15767
REINBAUM, A.
 Method of using photovoltaic cell using
 poly-N-vinylcarbazole complex Patent
 [NASA-CASE-NPO-10373] c03 N71-18698
 Dicyanoacetylene polymers Patent
 [NASA-CASE-XNP-03250] c06 N71-23500
 Heat detection and compositions and devices
 therefor
 [NASA-CASE-NPO-10764-1] c14 N73-14428
 Preparation of alkali metal dispersions
 [NASA-CASE-XNP-08876] c17 N73-28573
 Heat detection and compositions and devices
 therefor
 [NASA-CASE-NPO-10764-2] c35 N75-25122
 Durable antistatic coating for
 polymethylmethacrylate
 [NASA-CASE-NPO-13867-1] c27 N78-14164
 Nuclear alkylated pyridine aldehyde polymers and
 conductive compositions thereof
 [NASA-CASE-NPO-10557] c27 N78-17214
 Pressure transducer
 [NASA-CASE-NPO-11150] c35 N78-17359
 Membrane consisting of polyquaternary amine ion
 exchange polymer network interpenetrating the
 chains of thermoplastic matrix polymer
 [NASA-CASE-NPO-14001-1] c27 N81-14076
 Viscoelastic cationic polymers containing the
 urethane linkage
 [NASA-CASE-NPO-10830-1] c27 N81-15104
 Insoluble polyelectrolyte and ion-exchange
 hollow fiber impregnated therewith
 [NASA-CASE-NPO-13530-1] c25 N81-17187
 Ion-exchange hollow fibers
 [NASA-CASE-NPO-13309-1] c25 N81-19244
REMPER, R. C.
 Optically pumped resonance magnetometer for
 determining vectorial components in a spatial
 coordinate system Patent
 [NASA-CASE-IGS-04879] c14 N71-20428
REMPFER, P. S.
 Aircraft control system
 [NASA-CASE-ERC-10439] c02 N73-19004
RENNER, W.
 Bacteria detection instrument and method
 [NASA-CASE-GSC-11533-1] c14 N73-13435
RENNIE, P. A.
 Automated clinical system for chromosome analysis
 [NASA-CASE-NPO-13913-1] c52 N79-12694
RESWICK, J. B.
 Prosthesis coupling
 [NASA-CASE-KSC-11069-1] c52 N79-26772
REYNOLDS, R. I.
 Edge coating of flat wires
 [NASA-CASE-XMP-05757-1] c31 N79-21227
REYNOLDS, J. H.
 Device and method for determining X ray
 reflection efficiency of optical surfaces
 [NASA-CASE-MFS-20243] c23 N73-13662
REYNOLDS, R. K.
 Hydrogen-fueled engine
 [NASA-CASE-NPO-13763-1] c44 N78-33526
REYNOLDS, W. E.
 Circuit breaker utilizing magnetic latching

relays Patent
[NASA-CASE-MSC-11277] c09 N71-29008

RHEIN, R. A.
Curable liquid hydrocarbon prepolymers
containing hydroxyl groups and process for
producing same
[NASA-CASE-NPO-13137-1] c27 N80-32514

Prepolymer dianhydrides
[NASA-CASE-NPO-13899-1] c27 N80-32515

RHO, J. H.
Automated fluid chemical analyzer Patent
[NASA-CASE-XNP-09451] c06 N71-26754

RHODES, D. B.
Optical scanner
[NASA-CASE-LAR-11711-1] c74 N78-17866

Scanning afocal laser velocimeter projection
lens system
[NASA-CASE-LAR-12328-1] c74 N80-12866

RHODES, L. L.
Latching mechanism Patent
[NASA-CASE-MSC-15474-1] c15 N71-26162

RHODES, M. D.
Composite sandwich lattice structure
[NASA-CASE-LAR-11898-1] c24 N78-10214

Method of making a composite sandwich lattice
structure
[NASA-CASE-LAR-11898-2] c24 N78-17149

RHODES, P. H.
Electrophoresis device
[NASA-CASE-MPS-25426-1] c25 N81-29179

RIAZ, M.
Constant frequency output two stage induction
machine systems Patent
[NASA-CASE-ERC-10065] c09 N71-27364

RIBARICH, J. J.
Guidance and maneuver analyzer Patent
[NASA-CASE-XNP-09572] c14 N71-15621

RICCITELLO, S. B.
Polymeric foams from cross-linkable
poly-n-arylenebenzimidazoles
[NASA-CASE-ARC-11008-1] c27 N78-31232

RICCITELLO, S. B.
Modified polyurethane foams for fuel-fire Patent
[NASA-CASE-ARC-10098-1] c06 N71-24739

Flexible fire retardant foam
[NASA-CASE-ARC-10180-1] c28 N72-20767

Intumescent composition, foamed product prepared
therewith, and process for making same
[NASA-CASE-ARC-10304-1] c18 N73-26572

Flexible fire retardant polyisocyanate modified
neoprene foam
[NASA-CASE-ARC-10180-1] c27 N74-12814

Intumescent composition, foamed product prepared
therewith and process for making same
[NASA-CASE-ARC-10304-2] c27 N74-27037

Intumescent coatings containing
4,4'-dinitrosulfanilide
[NASA-CASE-ARC-11042-1] c24 N78-14096

Intumescent-ablator coatings using endothermic
fillers
[NASA-CASE-ARC-11043-1] c24 N78-27180

Ambient cure polyimide foams
[NASA-CASE-ARC-11170-1] c27 N79-11215

Fire protection covering for small diameter
missiles
[NASA-CASE-ARC-11104-1] c15 N79-26100

Catalysts for polyimide foams from aromatic
isocyanates and aromatic dianhydrides
[NASA-CASE-ARC-11107-1] c25 N80-16116

RICE, R. P.
Data compression system
[NASA-CASE-NPO-11243] c07 N72-20154

Space communication system for compressed data
with a concatenated Reed-Solomon-Viterbi
coding channel
[NASA-CASE-NPO-13545-1] c32 N77-12240

RICE, R. B.
Cryogenic storage system Patent
[NASA-CASE-XMS-04390] c31 N70-41871

RICE, R. B.
Extrusion can
[NASA-CASE-NPO-10812] c15 N73-13464

RICE, S. H.
Method of treating the surface of a glass member
[NASA-CASE-GSC-12110-1] c27 N77-32308

Method of forming a sharp edge on an optical
device
[NASA-CASE-GSC-12348-1] c74 N80-24149

Method for milling and drilling glass
[NASA-CASE-GSC-12636-1] c37 N80-29705

RICE, W. J.
Indicated mean-effective pressure instrument
[NASA-CASE-LRW-12661-1] c35 N79-14345

RICH, E., JR.
Bacterial contamination monitor
[NASA-CASE-GSC-10879-1] c14 N72-25413

Protein sterilization method of firefly
luciferase using reduced pressure and
molecular sieves
[NASA-CASE-GSC-10225-1] c06 N73-27086

RICHARD, C. E.
Low cycle fatigue testing machine
[NASA-CASE-LAR-10270-1] c32 N72-25877

RICHARD, R. B.
Angular accelerometer Patent
[NASA-CASE-XMS-05936] c14 N70-41682

RICHARDS, R. B.
Method for detecting pollutants
[NASA-CASE-LAR-11405-1] c45 N76-31714

RICHARDS, W. E.
Method and apparatus for optical modulating a
light signal Patent
[NASA-CASE-GSC-10216-1] c23 N71-26722

RICHARDSON, R. W.
Method for measuring cutaneous sensory perception
[NASA-CASE-MSC-13609-1] c05 N72-25122

RICHLEY, E. A.
Rocket engine Patent
[NASA-CASE-XLE-00342] c28 N70-37980

RICHMOND, J. C.
Ellipsoidal mirror reflectometer including means
for averaging the radiation reflected from the
sample Patent
[NASA-CASE-XGS-05291] c23 N71-16341

RICHTER, C. G.
Formed metal ribbon wrap Patent
[NASA-CASE-XLE-00164] c15 N70-36411

RICHTER, R. L.
Reversible motion drive system Patent
[NASA-CASE-NFO-10173] c15 N71-24696

RICHTER, I. A.
Dual digital video switcher
[NASA-CASE-KSC-10782-1] c33 N75-30431

RICHTER, B.
An improved solid electrolyte cell
[NASA-CASE-NPO-15269-1] c33 N81-16385

RICKETTS, R. H.
Aeroelastic instability stoppers for wind-tunnel
models
[NASA-CASE-LAR-12720-1] c09 N81-31229

Aeroelastic instability stoppers for wind-tunnel
models
[NASA-CASE-LAR-12458-1] c09 N81-31230

RIBBE, J. H.
Landing arrangement for aerial vehicles Patent
[NASA-CASE-XLA-00142] c02 N70-33286

Jet aircraft configuration Patent
[NASA-CASE-XLA-00087] c02 N70-33332

Landing arrangement for aerial vehicle Patent
[NASA-CASE-XLA-00806] c02 N70-34858

Landing arrangement for aerospace vehicle Patent
[NASA-CASE-XLA-00805] c31 N70-38010

Control system for rocket vehicles Patent
[NASA-CASE-XLA-01163] c21 N71-15582

RIBBLING, R. W.
Force-balanced, throttle valve Patent
[NASA-CASE-NPO-10808] c15 N71-27432

Bipropellant injector
[NASA-CASE-XNP-09461] c28 N72-23809

RIEKER, L. L.
Cross-linked polyvinyl alcohol and method of
making same
[NASA-CASE-LRW-13504-1] c27 N81-27279

RILEY, J. P.
Compact solar still Patent
[NASA-CASE-XMS-04533] c15 N71-23086

RILEY, T. J.
Nickel-base alloy Patent
[NASA-CASE-XLE-00283] c17 N70-36616

RINHARD, G. A.
Tumbler system to provide random motion
[NASA-CASE-XGS-02437] c15 N69-21472

RINDNER, W.
Voltage tunable Gunn-type microwave generator
Patent
[NASA-CASE-XER-07894] c09 N71-18721

Transverse piezoresistance and pinch effect
electromechanical transducers Patent
[NASA-CASE-ERC-10088] c26 N71-25490

Pressure sensitive transducers Patent
[NASA-CASE-ERC-10087] c14 N71-27334

Gunn-type solid state devices
[NASA-CASE-YER-07895] c26 N72-25679

Electricity measurement devices employing liquid
crystalline materials
[NASA-CASE-ERC-10275] c26 N72-25680

Semiconductor transducer device
[NASA-CASE-ERC-10087-2] c14 N72-31446

RINEHART, D.
Space suit
[NASA-CASE-MSC-12609-1] c05 N73-32012

RINGELMAN, J. P.
Regulated power supply Patent
[NASA-CASE-XMS-01991] c09 N71-21449

RIPPI, R. B.
Linear phase demodulator including a phase
locked loop with auxiliary feedback loop
[NASA-CASE-GSC-12018-1] c33 N77-14334

RITCHIE, D. G.
Soil particles separator, collector and viewer
Patent
[NASA-CASE-INP-09770] c15 N71-20440

Material handling device Patent
[NASA-CASE-INP-09770-3] c11 N71-27036

Screen particle separator
[NASA-CASE-INP-09770-2] c15 N72-22483

RITCHIE, D. W.
Solar battery with interconnecting means for
plural cells Patent
[NASA-CASE-INP-06506] c03 N71-11050

RITCHIE, V. S.
Aerodynamic measuring device Patent
[NASA-CASE-XLA-00481] c14 N70-36824

Check valve assembly for a probe Patent
[NASA-CASE-XLA-00128] c15 N70-37925

RITTER, D. L.
Foldable construction block
[NASA-CASE-MSC-12233-2] c32 N73-13921

RLOFF, K. L.
Dual wavelength scanning Doppler velocimeter
[NASA-CASE-ARC-10637-1] c35 N75-16783

ROACH, J. B.
Casting propellant in rocket engine
[NASA-CASE-LAR-11995-1] c28 N77-10213

ROBBINS, B. J.
Attitude control system for sounding rockets
Patent
[NASA-CASE-XGS-01654] c31 N71-24750

ROBELEN, D. B.
Deploy/release system
[NASA-CASE-LAR-11575-1] c02 N76-16014

ROBERTS, D. B.
Apparatus for testing wiring harness by
vibration generating means
[NASA-CASE-MSC-15158-1] c14 N72-17325

ROBERTS, D. L.
Laser apparatus for removing material from
rotating objects Patent
[NASA-CASE-MFS-11279] c16 N71-20400

ROBERTS, E. J.
Cryogenic feedthrough
[NASA-CASE-LAR-10031] c15 N72-22484

ROBERTS, M. L.
Stainless steel panel for selective absorption
of solar energy and the method of producing
said panel
[NASA-CASE-MFS-23518-2] c44 N77-31611

Method for making an aluminum or copper
substrate panel for selective absorption of
solar energy
[NASA-CASE-MFS-23518-1] c44 N79-11469

Aluminum or copper substrate panel for
selective absorption of solar energy
[NASA-CASE-MFS-23518-3] c44 N80-16452

ROBERTS, V. W.
Silent emergency alarm system for schools and
the like
[NASA-CASE-NPO-11307-1] c10 N73-30205

ROBERTSON, A. J.
Aircraft control system
[NASA-CASE-ERC-10439] c02 N73-15004

ROBERTSON, J. B.
High field CdS detector for infrared radiation
[NASA-CASE-LAR-11027-1] c35 N74-18088

ROBERTSON, M. B., III
Satellite retrieval system
[NASA-CASE-MFS-25403-1] c18 N81-24164

ROBERTSON, M. L.
Two-axis controller Patent
[NASA-CASE-XFR-04104] c03 N70-42073

ROBILLARD, G.
Apparatus and method for control of a solid
fueled rocket vehicle Patent
[NASA-CASE-INP-00217] c28 N70-38181

ROBINS, A. M.
Supersonic aircraft Patent
[NASA-CASE-XLA-04451] c02 N71-12243

ROBINSON, G. P.
Heat flux sensor assembly
[NASA-CASE-XMS-05909-1] c14 N69-27459

ROBINSON, M.
Solid state chemical source for ammonia beam
maser Patent
[NASA-CASE-IGS-01504] c16 N70-41578

ROBINSON, M. B.
Method and apparatus for supercooling and
solidifying substances
[NASA-CASE-MFS-25242-1] c35 N81-24413

ROBINSON, R. K.
Fuselage structure using advanced technology
metal matrix fiber reinforced composites
[NASA-CASE-LAR-11688-1] c05 N78-18045

ROBINSON, W. J., JR.
Microwave power transmission system wherein
level of transmitted power is controlled by
reflections from receiver
[NASA-CASE-MFS-21470-1] c44 N74-19870

ROBSON, P. B.
Traveling wave solid state amplifier utilizing a
semiconductor with negative differential
mobility
[NASA-CASE-HCN-10069] c33 N75-27251

ROCHOW, S. E.
Hydroxy terminated perfluoro ethers Patent
[NASA-CASE-NFO-10768] c06 N71-27254

Perfluoro polyether acyl fluorides
[NASA-CASE-NFO-10765] c06 N72-20121

Polyurethane resins from hydroxy terminated
perfluoro ethers
[NASA-CASE-NFO-10768-2] c06 N72-27144

Highly fluorinated polyurethanes
[NASA-CASE-NFO-10767-2] c06 N72-27151

Highly fluorinated polyurethanes
[NASA-CASE-NFO-10767-1] c06 N73-33076

RODNER, W. B.
Solar cell mounting Patent
[NASA-CASE-INP-00826] c03 N71-20895

RODRIGUEZ, G. B.
Buck/boost regulator
[NASA-CASE-GSC-12360-1] c33 N81-19392

RODER, E. B.
Brazing alloy binder
[NASA-CASE-INP-05868] c26 N75-27125

Brazing alloy composition
[NASA-CASE-INP-06053] c26 N75-27126

Brazing alloy
[NASA-CASE-INP-03878] c26 N75-27127

ROESKE, P. W.
Inductive liquid level detection system Patent
[NASA-CASE-XLB-01609] c14 N71-10500

ROGALLO, F. M.
Aeroflexible structures
[NASA-CASE-XLA-06095] c01 N69-39981

Jet aircraft configuration Patent
[NASA-CASE-XLA-00087] c02 N70-33332

Control for flexible parawing Patent
[NASA-CASE-XLA-06958] c02 N71-11038

ROGALLO, V. L.
Propeller blade loading control Patent
[NASA-CASE-XAC-00139] c02 N70-34856

Null-type vacuum microbalance Patent
[NASA-CASE-XAC-00472] c15 N70-40180

Thermo-protective device for balances Patent
[NASA-CASE-XAC-00648] c14 N70-40400

Force transducer Patent
[NASA-CASE-XAC-01101] c14 N70-41957

ROGERS, F. O.
Synthesis of zinc titanate pigment and coatings
containing the same
[NASA-CASE-MFS-13532] c18 N72-17532

ROGERS, J. B.
Pneumatic load compensating or controlling system
[NASA-CASE-ARC-10907-1] c37 N75-32465

Smoke generator
[NASA-CASE-ARC-10905-1] c37 N77-13418

ROGOWSKI, R. S.
Method for detecting pollutants
[NASA-CASE-LAR-11405-1] c45 N76-31714
Thermoluminescent aerosol analysis
[NASA-CASE-LAR-12046-1] c25 N78-15210

ROLF, E.
Laser Doppler system for measuring three dimensional vector velocity Patent
[NASA-CASE-MFS-20386] c21 N71-15212

ROLIK, G. P.
Solar cell panels with light transmitting plate
[NASA-CASE-NPO-10747] c03 N72-22042

ROLLER, R. P.
Demodulator for carrier transducers
[NASA-CASE-NUC-10107-1] c33 N74-17930

ROLLINS, G. H.
System for calibrating pressure transducer
[NASA-CASE-LAR-10910-1] c35 N74-13132

ROLLINS, J. B.
Externally supported internally stabilized flexible duct joint
[NASA-CASE-MFS-19194-1] c37 N76-14460

ROM, P. E.
Gas core nuclear reactor Patent
[NASA-CASE-LEW-10250-1] c22 N71-28759

ROMAN, J. A.
Biomedical electrode arrangement Patent
[NASA-CASE-XPR-10856] c05 N71-11189
Method and apparatus for attaching physiological monitoring electrodes Patent
[NASA-CASE-XPR-07658-1] c05 N71-26293
Gas low pressure low flow rate metering system Patent
[NASA-CASE-FRC-10022] c12 N71-26546
Respiration monitor
[NASA-CASE-FRC-10012] c14 N72-17329

ROMAN, R. F.
Hydrogen hollow cathode ion source
[NASA-CASE-LEW-12940-1] c72 N80-33186

ROMANCZYK, K. C.
Fringe counter for interferometers Patent
[NASA-CASE-LAR-10204] c14 N71-27215

ROMMEL, M. A.
Hydrogen leak detection device Patent
[NASA-CASE-MFS-11537] c14 N71-20442

ROMVARY, E., JR.
Intermittent type silica gel adsorption refrigerator Patent
[NASA-CASE-XNP-00920] c15 N71-15906

RONEY, B. H.
Evacuation valve
[NASA-CASE-LAR-10061-1] c15 N72-31483

ROOT, G. L.
Valve seat
[NASA-CASE-NPO-10606] c15 N72-25451

ROSALES, L. A.
Control valve and co-axial variable injector Patent
[NASA-CASE-XNP-09702] c15 N71-17654
Multiple orifice throttle valve Patent
[NASA-CASE-XNP-09698] c15 N71-18580

ROSE, S. D.
Coal-rock interface detector
[NASA-CASE-MFS-23725-1] c43 N79-31706

ROSEN, H. A.
Varactor high level mixer
[NASA-CASE-IGS-02171] c09 N69-24324
Apparatus for changing the orientation and velocity of a spinning body traversing a path Patent
[NASA-CASE-HQN-00936] c31 N71-29050

ROSEN, L.
Focused image holography with extended sources Patent
[NASA-CASE-ERC-10019] c16 N71-15551
Recording and reconstructing focused image holograms Patent
[NASA-CASE-ERC-10017] c16 N71-15567
Method and means for recording and reconstructing holograms without use of a reference beam Patent
[NASA-CASE-ERC-10020] c16 N71-26154

ROSENBAUM, B. J.
Flow test device
[NASA-CASE-XMS-04917] c14 N69-24257

ROSENBLUM, L.
Split welding chamber Patent
[NASA-CASE-LEW-11531] c15 N71-14932
Analytical test apparatus and method for determining oxide content of alkali metal Patent
[NASA-CASE-XLE-01997] c06 N71-23527

ROSENBERG, L. G.
Method and apparatus for background signal reduction in opto-acoustic absorption measurement
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ROSIER, W. B.
Portable device for use in starting air-start-units for aircraft and having cable lead testing capability
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ROSIN, A. D.
Zero gravity separator Patent
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ROSIN, S.
Wide angle long eye relief eyepiece Patent
[NASA-CASE-XMS-06056-1] c23 N71-24857
Bitchey-Chretien Telescope
[NASA-CASE-GSC-11487-1] c14 N73-30393

ROSINSKI, W. K.
Adjustable force probe
[NASA-CASE-MFS-20760] c14 N72-33377

ROSITANO, S. A.
Visual examination apparatus
[NASA-CASE-ARC-10329-1] c05 N73-26072
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[US-PATENT-RE-28,921] c52 N76-30793

ROSS, L. O.
Preparation of heterocyclic block copolymer omega-diamidoximes
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ROSSEN, R. H.
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Fiber modified polyurethane foam for ballistic protection
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Preparation of perfluorinated 1,2,4-oxadiazoles
[NASA-CASE-ARC-11267-2] c25 N80-26407
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The 1,2,4-oxadiazole elastomers
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Bifunctional monomers having terminal oxime and cyano or amidine groups
[NASA-CASE-ARC-11253-3] c27 N81-24256

ROSSI, B. B.
X-ray reflection collimator adapted to focus X-radiation directly on a detector Patent
[NASA-CASE-XHQ-04106] c14 N70-40240

ROSSON, V. J.
Apparatus for measuring conductivity and velocity of plasma utilizing a plurality of sensing coils positioned in the plasma Patent
[NASA-CASE-XAC-05695] c25 N71-16073

ROTH, H.
Voltage tunable Gunn-type microwave generator Patent
[NASA-CASE-XER-07894] c09 N71-18721
Gunn-type solid state devices
[NASA-CASE-XER-07895] c26 N72-25679

ROTHMAN, A.
Supporting and protecting device Patent
[NASA-CASE-XNP-00580] c11 N70-35383

ROUDEBUSH, W. H.
Gas turbine combustor Patent
[NASA-CASE-LEW-10286-1] c28 N71-28915

BOUGHTON, H. A.
Method and apparatus for vibration analysis utilizing the Mossbauer effect
[NASA-CASE-XMP-05882] c35 N75-27329

ROUSEY, W. J.
System for generating timing and control signals
[NASA-CASE-NPO-13125-1] c33 N75-19519

ROUTH, D. E.
Multilevel metallization method for fabricating
a metal oxide semiconductor device
[NASA-CASE-NPS-23541-1] c76 N75-14906
Method of construction of a multi-cell solar array
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ROUZEB, L. E.
Segmented superconducting magnet for a broadband
traveling wave maser Patent
[NASA-CASE-XGS-10518] c16 N71-26554

ROWE, H. E.
Dually mode locked Nd:YAG laser
[NASA-CASE-GSC-11746-1] c36 N75-15654

ROWLAND, C. W.
Apparatus for ejection of an instrument cover
[NASA-CASE-XMP-04132] c15 N69-27502
Laser communication system for controlling
several functions at a location remote to the
laser
[NASA-CASE-LAR-10311-1] c16 N73-16536

ROWLEY, P. D.
Measurement of plasma temperature and density
using radiation absorption
[NASA-CASE-ARC-10598-1] c75 N74-30156

ROY, B. L.
Cosmic dust analyzer
[NASA-CASE-MSC-13802-2] c35 N76-15431
Particle parameter analyzing system
[NASA-CASE-XLB-06694] c33 N78-17293
Apparatus for handling micron size range
particulate material
[NASA-CASE-NPO-10151] c37 N78-17386

ROY, O.
Synthesis of superconducting compounds by
explosive compaction of powders
[NASA-CASE-NPS-20861-1] c18 N73-32437

ROZAS, P.
Doppler radar having phase modulation of both
transmitted and reflected return signals
[NASA-CASE-MSC-16675-1] c32 N81-29312

ROBERT, K. F.
Method of obtaining permanent record of surface
flow phenomena Patent
[NASA-CASE-XLA-01353] c14 N70-41366
Quick release connector Patent
[NASA-CASE-XLA-01141] c15 N71-13789

RUBIN, B.
Process for the preparation of brushite crystals
[NASA-CASE-BRC-10338] c04 N72-33072

RUBIN, D. C.
Electricity measurement devices employing liquid
crystalline materials
[NASA-CASE-BRC-10275] c26 N72-25680

RUBIN, I.
Hexagon solar power panel
[NASA-CASE-NPO-12148-1] c44 N78-27515

RUDDOCK, K. A.
Optically pumped resonance magnetometer for
determining vectoral components in a spatial
coordinate system Patent
[NASA-CASE-XGS-04879] c14 N71-20428

RUDERMAN, I. W.
Metabolic rate meter and method
[NASA-CASE-MSC-12239-1] c52 N79-21750

RUDMAN, A. A.
Coupling device for moving vehicles
[NASA-CASE-GSC-12322-1] c37 N80-14398
Device for coupling a first vehicle to a second
vehicle
[NASA-CASE-GSC-12429-1] c37 N81-14320

RUDNICK, I.
Acoustic driving of rotor
[NASA-CASE-NPO-14005-1] c71 N79-20827

RUEHR, W. C.
Curved centerline air intake for a gas turbine
engine
[NASA-CASE-LRW-13201-1] c07 N81-14999

RUEHR, L. E.
Determining distance to lightning strokes from a
single station
[NASA-CASE-KSC-10698] c07 N73-20175
Rocket borne instrument to measure electric
fields inside electrified clouds
[NASA-CASE-KSC-10730-1] c14 N73-32318

RUIZ, W. V.
Precision heat forming of tetrafluoroethylene
tubing
[NASA-CASE-MSC-18430-1] c31 N80-17292

RUMBLE, C. V.
Means for accommodating large overstrain in lead
wires
[NASA-CASE-LAR-10168-1] c33 N74-22865

RUMML, J. A.
Metabolic analyzer
[NASA-CASE-NPS-21415-1] c52 N74-20728

RUMMLER, D. R.
Automatic force measuring system Patent
[NASA-CASE-XLA-02605] c14 N71-10773
Low mass truss structure
[NASA-CASE-LAR-10546-1] c11 N72-25287

RUNDELL, D. J.
Variable mixer propulsion cycle
[NASA-CASE-LRW-12917-1] c07 N78-18067

RUPE, J. E.
Hydrogen rich gas generator
[NASA-CASE-NPO-13342-1] c37 N76-16446
System for minimizing internal combustion engine
pollution emission
[NASA-CASE-NPO-13402-1] c37 N76-18457
Hydrogen rich gas generator
[NASA-CASE-NPO-13342-2] c44 N76-29700

RUPNIK, D. B.
Switching circuit Patent
[NASA-CASE-IMP-06505] c10 N71-24799

RUPP, C. C.
Attitude control system
[NASA-CASE-NPS-22787-1] c15 N77-10113
Tetherline system for orbiting satellites
[NASA-CASE-NPS-23564-1] c15 N78-25119

RUPPE, E. F.
Heat treat fixture and method of heat treating
[NASA-CASE-LAR-11821-1] c26 N80-28492

RUSSELL, C. H.
Analog to digital converter tester Patent
[NASA-CASE-XLA-06713] c14 N71-28991

RUSSELL, G. B.
Inert gas metallic vapor laser
[NASA-CASE-NPO-13449-1] c36 N75-32441
Isotope separation using metallic vapor lasers
[NASA-CASE-NPO-13550-1] c36 N77-26477

RUSSELL, J. H., III
Event recorder Patent
[NASA-CASE-XLA-01832] c14 N71-21006
Ablation sensor Patent
[NASA-CASE-XLA-01791] c14 N71-22991

RUSSELL, L. D.
High intensity radiant energy pulse source
having means for opening shutter when light
flux has reached a desired level
[NASA-CASE-ARC-10178-1] c09 N72-17152
Thermoelectric radiometer utilizing polymer film
[NASA-CASE-ARC-10138-1] c14 N72-24477

RUSSELL, W. E.
Method and apparatus for making curved
reflectors Patent
[NASA-CASE-XLE-08917] c15 N71-15597
Apparatus for making curved reflectors Patent
[NASA-CASE-XLE-08917-2] c15 N71-24836

RUST, B.
Solenoid construction Patent
[NASA-CASE-XNP-01951] c09 N70-41929

RYAN, C. B.
Quadrature demodulation
[NASA-CASE-GSC-12137-1] c33 N78-32338

RYASON, P. B.
Solar photolysis of water
[NASA-CASE-NPO-13675-1] c44 N77-32580
Solar photolysis of water
[NASA-CASE-NPO-14126-1] c44 N79-11470
Continuous coal processing method
[NASA-CASE-NPO-13758-2] c31 N81-15154

S

SABAROFF, S.
Broadband frequency discriminator Patent
[NASA-CASE-NPO-10096] c07 N71-24583
Systems and methods for determining radio
frequency interference
[NASA-CASE-GSC-12150-1] c32 N79-11265

SABELMAN, E. E.
Pump for delivering heated fluids
[NASA-CASE-NPO-11417] c15 N73-24513
Ferofluidic solenoid
[NASA-CASE-NPO-11738-1] c09 N73-30185

- SABOL, A. P.
Crossed-field MHD plasma generator/ accelerator
Patent
[NASA-CASE-XLA-03374] c25 N71-15562
Self-repeating plasma generator having
communicating annular and linear arc discharge
passages Patent
[NASA-CASE-XLA-03103] c25 N71-21693
Apparatus and method for generating large mass
flow of high temperature air at hypersonic
speeds
[NASA-CASE-LAR-10612-1] c12 N73-26144
Heat exchanger system and method
[NASA-CASE-LAR-10799-2] c34 N76-17317
Solar hydrogen generator
[NASA-CASE-LAR-11361-1] c44 N77-22607
- SACKS, B. H.
Magnetically actuated tuning method for Gunn
oscillators
[NASA-CASE-NPO-12106] c09 N73-15235
- SADHUKHAN, P.
Process for preparing higher oxides of the
alkali and alkaline earth metals
[NASA-CASE-ARC-1C992-1] c26 N78-32229
- SAFFREN, M. M.
Material suspension within an acoustically
excited resonant chamber
[NASA-CASE-NPO-13263-1] c12 N75-24774
Heat operated cryogenic electrical generator
[NASA-CASE-NPO-13303-1] c20 N75-24837
Doped Josephson tunneling junction for use in a
sensitive IR detector
[NASA-CASE-NPO-13348-1] c33 N75-31332
Magnetometer using superconducting rotating body
[NASA-CASE-NPO-13388-1] c35 N76-16390
Method and apparatus for generating coherent
radiation in the ultra-violet region and above
by use of distributed feedback
[NASA-CASE-NPO-13346-1] c36 N76-29575
Apparatus for photon excited catalysis
[NASA-CASE-NPO-13566-1] c25 N77-32255
- SAHINKAYA, Y.
Optimal control system for an electric motor
driven vehicle
[NASA-CASE-NPO-11210] c11 N72-20244
- SAINSBURY-CARTER, J. B.
Bonded joint and method
[NASA-CASE-LAR-10900-1] c37 N74-23064
- SAINTCLAIR, T. L.
Polyimide adhesives
[NASA-CASE-LAR-11397-1] c27 N75-29263
- SAKELLARIS, P. C.
Automatic fluid dispenser
[NASA-CASE-ARC-10820-1] c35 N78-19466
- SALAMA, A. M.
Method of mitigating titanium impurities effects
in p-type silicon material for solar cells
[NASA-CASE-NPO-14635-1] c44 N80-24741
Improving the efficiency of silicon solar cells
containing chromium
[NASA-CASE-NPO-15179-1] c44 N80-32850
- SALMERIE, C. T.
Impact absorbing blade mounts for variable pitch
blades
[NASA-CASE-LEW-12313-1] c37 N78-10468
- SALISBURY, J. K., JR.
Controller arm for a remotely related slave arm
[NASA-CASE-ARC-11052-1] c37 N79-28551
- SALMIES, S.
Radiation direction detector including means for
compensating for photocell aging Patent
[NASA-CASE-XLA-00183] c14 N70-4C239
Spacecraft separation system for spinning
vehicles and/or payloads Patent
[NASA-CASE-XLA-02132] c31 N71-1C582
- SALORON, P. M.
Programmable scan/read circuitry for charge
coupled device imaging detectors
[NASA-CASE-NPO-15345-1] c33 N81-27403
- SALTER, W. E.
Pseudo-noise test set for communication system
evaluation
[NASA-CASE-MPS-22671-1] c35 N75-21582
Method of and means for testing a tape
record/playback system
[NASA-CASE-MPS-22671-2] c35 N77-17426
- SALTZMAN, E. J.
Traversing probe Patent
[NASA-CASE-IFR-02007] c12 N71-24692
- Improved low-drag ground vehicle particularly
suited for use in safely transporting livestock
[NASA-CASE-FRC-11058-1] c85 N80-33312
- SALVINSKI, E. J.
Electrohydrodynamic control valve Patent
[NASA-CASE-NPO-10416] c12 N71-27332
Ultrasonically bonded valve assembly
[NASA-CASE-NPO-13360-1] c37 N75-25185
- SAMFIELD, E.
Inflatable tether Patent
[NASA-CASE-XMS-10993] c15 N71-28936
- SAMONSKI, P. H., JR.
Liquid-gas separator for zero gravity
environment Patent
[NASA-CASE-XMS-01492] c05 N70-41297
- SAHSON, J. A. B.
Analytical photoionization mass spectrometer
with an argon gas filter between the light
source and monochromator Patent
[NASA-CASE-LAR-10180-1] c06 N71-13461
- SAMSON, R.
Sealed cabinetry Patent
[NASA-CASE-MSC-12168-1] c09 N71-18600
- SAN MIGUEL, A.
Means and method of measuring viscoelastic
strain Patent
[NASA-CASE-YNP-01153] c32 N71-17645
Miniature stress transducer Patent
[NASA-CASE-YNP-02983] c14 N71-21091
- SANDBORN, V. A.
Particle beam measurement apparatus using beam
kinetic energy to change the heat sensitive
resistance of the detection probe Patent
[NASA-CASE-XLE-00243] c14 N70-38602
Apparatus for increasing ion engine beam density
Patent
[NASA-CASE-XLE-00519] c28 N70-41576
- SANDER, R. C.
Transient video signal recording with expanded
playback Patent
[NASA-CASE-ARC-10003-1] c09 N71-25866
- SANDERS, B. W.
Airflow control system for supersonic inlets
[NASA-CASE-LEW-11188-1] c02 N74-20646
- SANDFORD, H. C.
Solar cell angular position transducer
[NASA-CASE-LAR-11999-1] c44 N80-18552
- SANDBOCK, G. D.
High temperature cobalt-base alloy Patent
[NASA-CASE-XLE-02991] c17 N71-16025
High temperature ferromagnetic cobalt-base alloy
Patent
[NASA-CASE-XLE-03629] c17 N71-23248
Cobalt-base alloy
[NASA-CASE-LEW-10436-1] c17 N73-32415
- SANDSTROM, D. B.
Fabrication of single crystal film semiconductor
devices
[NASA-CASE-ERC-10222] c09 N72-22199
- SANTAPPA, D.
Dually mode locked Nd:YAG laser
[NASA-CASE-GSC-11746-1] c36 N75-19654
- SARBOLOUKI, M. M.
Photomechanical transducer
[NASA-CASE-NPO-14363-1] c39 N81-25400
Asymmetric polyimide separation membrane and
method
[NASA-CASE-NPO-15431-1] c25 N81-29178
- SARGISSON, D. F.
Gas turbine engine with convertible accessories
[NASA-CASE-LEW-12390-1] c07 N78-17056
Integrated gas turbine engine-nacelle
[NASA-CASE-LEW-12389-2] c07 N78-18066
Integrated gas turbine engine-nacelle
[NASA-CASE-LEW-12389-3] c07 N79-14096
- SARVER, G. L., III
Solar power satellite system
[NASA-CASE-HCN-10949-1] c44 N81-16530
- SATER, B. L.
Method of cold welding using ion beam technology
[NASA-CASE-LEW-12982-1] c37 N81-19455
- SAUER, L. S.
Hybrid lubrication system and bearing Patent
[NASA-CASE-YNP-01641] c15 N71-22997
- SAUER, B. L.
Automatic biowaste sampling
[NASA-CASE-MSC-14640-1] c54 N76-14804
- SAUER, T. H.
Parallel-plate viscometer with double diaphragm

suspension
[NASA-CASE-NPO-11387] c14 N73-14429

SAUERS, D. G.
Measuring device Patent
[NASA-CASE-XMS-01546] c14 N70-40233

Lightweight electrically-powered flexible thermal laminate
[NASA-CASE-MSC-12662-1] c33 N79-12331

SAUNDERS, A. A., JR.
Method and apparatus for rapid thrust increases in a turbofan engine
[NASA-CASE-LEW-12971-1] c07 N80-18039

Integrated control system for a gas turbine engine
[NASA-CASE-LEW-12594-2] c07 N81-19116

SAUNDERS, A. R.
A technique for breaking ice in the path of a ship
[NASA-CASE-LAR-10815-1] c16 N72-22520

SAUNDERS, W. T.
Method of producing porous tungsten ionizers for ion rocket engines Patent
[NASA-CASE-XLB-00455] c28 N70-38197

SAUTER, R. J.
Foot pedal operated fluid type exercising device
[NASA-CASE-MSC-11561-1] c05 N73-32014

SAWKO, R. H.
Polymeric vehicles as carriers for sulfonic acid salt of nitrosubstituted aromatic amines
[NASA-CASE-ARC-10325] c06 N72-25147

Intumescent paint containing nitrile rubber
[NASA-CASE-ARC-10196-1] c18 N73-13562

Transparent fire resistant polymeric structures
[NASA-CASE-ARC-10813-1] c27 N76-16230

Intumescent coatings containing 4,4'-dinitrosulfanilide
[NASA-CASE-ARC-11042-1] c24 N78-14096

Intumescent-ablator coatings using endothermic fillers
[NASA-CASE-ARC-11043-1] c24 N78-27180

Ambient cure polyimide foams
[NASA-CASE-ARC-11170-1] c27 N79-11215

Fire protection covering for small diameter missiles
[NASA-CASE-ARC-11104-1] c15 N79-26100

Catalysts for polyimide foams from aromatic isocyanates and aromatic dianhydrides
[NASA-CASE-ARC-11107-1] c25 N80-16116

Structural wood panels with improved fire resistance
[NASA-CASE-ARC-11174-1] c24 N81-13999

SAWYER, C. D.
Control for nuclear thermionic power source
[NASA-CASE-NPO-13114-2] c73 N78-28913

SAWYER, D. E.
Semiconductor-ferroelectric memory device
[NASA-CASE-ERC-10307] c08 N72-21198

Fabrication of single crystal film semiconductor devices
[NASA-CASE-ERC-10222] c09 N72-22199

SAWYER, J. T.
Leak detector
[NASA-CASE-MFS-21761-1] c35 N75-15931

SAWYER, R. V.
Electrical servo actuator bracket
[NASA-CASE-FRC-11044-1] c37 N81-33483

SAWYER, R. W.
Computer circuit card puller
[NASA-CASE-FRC-11042-1] c37 N80-20589

SCAPICCHIO, A. J.
Apparatus and method for separating a semiconductor wafer Patent
[NASA-CASE-ERC-10138] c26 N71-14354

SCHACH, M.
Apparatus for controlling the temperature of balloon-borne equipment
[NASA-CASE-GSC-11620-1] c34 N74-23039

SCHACHT, W. F.
Water cooled contactor for anode in carbon arc mechanism
[NASA-CASE-XMS-03700] c15 N69-24266

SCHACHTER, M. M.
Apparatus for producing three-dimensional recordings of fluorescence spectra. Patent
[NASA-CASE-XGS-01231] c14 N70-41676

SCHAEFER, D. H.
Binary magnetic memory device Patent
[NASA-CASE-XGS-00174] c08 N70-34743

Logarithmic converter Patent
[NASA-CASE-XLA-00471] c08 N70-34778

Full binary adder Patent
[NASA-CASE-XGS-00689] c08 N70-34787

Ripple add and ripple subtract binary counters Patent
[NASA-CASE-XGS-04766] c08 N71-18602

Computing apparatus Patent
[NASA-CASE-XGS-04765] c08 N71-18693

Signal detection and tracking apparatus Patent
[NASA-CASE-XGS-03502] c10 N71-20852

Two-dimensional radiant energy array computers and computing devices
[NASA-CASE-GSC-11839-1] c60 N77-14751

Memory device for two-dimensional radiant energy array computers
[NASA-CASE-GSC-11839-2] c60 N78-10709

SCHAEFER, G. J.
Apparatus and method for determining the position of a radiant energy source
[NASA-CASE-GSC-12147-1] c32 N81-27341

SCHAEER, G. R.
Method of making porous conductive supports for electrodes
[NASA-CASE-GSC-11367-1] c44 N74-19692

SCHAEFER, G. L.
Multivibrator circuit with means to prevent false triggering from supply voltage fluctuations Patent
[NASA-CASE-ABC-10137-1] c09 N71-28468

SCHAEFFERT, J. C.
Ultra-long monostable multivibrator employing bistable semiconductor switch to allow charging of timing circuit Patent
[NASA-CASE-XGS-00381] c09 N70-34819

SCHALLER, W. C.
Apparatus for vibrational testing of articles
[NASA-CASE-GSC-11302-1] c14 N73-13416

SCHAEFFERT, G. T.
Method and apparatus for wavelength tuning of liquid lasers
[NASA-CASE-EBC-10187] c16 N69-31343

SCHAUS, R. B.
Thermobulb mount Patent
[NASA-CASE-NPO-10158] c33 N71-16356

SCHREIBER, H.
Metering gun for dispensing precisely measured charges of fluid
[NASA-CASE-MFS-21163-1] c54 N74-17853

SCHREIBLEY, D. W.
Flexible formulated plastic separators for alkaline batteries
[NASA-CASE-LEW-12363-4] c44 N80-18555

SCHRELL, J. T.
Cryogenic thermal insulation Patent
[NASA-CASE-XMF-05046] c33 N71-28892

SCHER, M. P.
Spacecraft attitude control method and apparatus
[NASA-CASE-BQN-10439] c21 N72-21624

SCHER, S. H.
Hot air balloon deceleration and recovery system Patent
[NASA-CASE-XLA-06824-2] c02 N71-11037

SCHIFFNER, G.
Power supply for carbon dioxide lasers
[NASA-CASE-GSC-11222-1] c16 N73-32391

SCHILLER, J. G.
Method and device for the detection of phenol and related compounds
[NASA-CASE-LEW-12513-1] c25 N79-22235

SCHINDLER, R. A.
Interferometer direction sensor Patent
[NASA-CASE-NPO-10320] c14 N71-17655

Interferometer servo system Patent
[NASA-CASE-NPO-10300] c14 N71-17662

Single reflector interference spectrometer and drive system therefor
[NASA-CASE-NPO-11932-1] c35 N74-23040

Interferometer mirror tilt correcting system
[NASA-CASE-NPO-13687-1] c35 N78-18391

Over-under double-pass interferometer
[NASA-CASE-NPO-13999-1] c35 N78-18395

Apparatus for providing a servo drive signal in a high-speed stepping interferometer
[NASA-CASE-NPO-13569-2] c35 N79-14348

Velocity servo for continuous scan Fourier interference spectrometer
[NASA-CASE-NPO-14093-1] c35 N80-20563

Interferometer
[NASA-CASE-NPO-14448-1] c74 N81-29963

SCHLESINGER, F. W.
Optical alignment system Patent
[NASA-CASE-XNP-02029] c14 N70-41955

SCHLOSS, A. L.
Solid state switch
[NASA-CASE-XNP-09228] c09 N69-27500

SCHMIDT, E. E.
Caterpillar micro positioner
[NASA-CASE-GSC-10780-1] c14 N72-16283

SCHMIDT, H. W.
Conical valve plug Patent
[NASA-CASE-XLE-00715] c15 N70-34859
Fluid coupling Patent
[NASA-CASE-XLE-00397] c15 N76-36492

SCHMIDT, K. C.
Radiation and particle detector and amplifier
[NASA-CASE-NPO-12128-1] c14 N73-32317

SCHMIDT, L. F.
Photosensitive device to detect bearing deviation Patent
[NASA-CASE-XNP-00438] c21 N70-35089
Light sensor
[NASA-CASE-NPO-11311] c14 N72-25414
Sun direction detection system
[NASA-CASE-NPO-13722-1] c74 N77-22951

SCHMIDT, R.
Reactance control system Patent
[NASA-CASE-XNP-01598] c21 N71-15583

SCHMIDT, R. F.
Monopulse system with an electronic scanner
[NASA-CASE-XGS-05582] c07 N69-27460
Electronic scanning of 2-channel monopulse patterns Patent
[NASA-CASE-GSC-10299-1] c09 N71-24804
Dish antenna having switchable beamwidth
[NASA-CASE-GSC-11760-1] c33 N75-19516
Single frequency, two feed dish antenna having switchable beamwidth
[NASA-CASE-GSC-11968-1] c32 N76-15329
Variable beamwidth antenna
[NASA-CASE-GSC-11862-1] c32 N76-18295
Switchable beamwidth monopulse method and system
[NASA-CASE-GSC-11924-1] c33 N76-27472

SCHMIDT, W. G.
Ammonium perchlorate composite propellant containing an organic transitional metal chelate catalytic additive Patent
[NASA-CASE-LAR-10173-1] c27 N71-14090

SCHMITT, A. L.
Sun angle calculator
[NASA-CASE-MSC-12617-1] c35 N76-29552

SCHMITZ, B. W.
Trajectory-correction propulsion system Patent
[NASA-CASE-XNP-01104] c28 N70-35931

SCHMITZ, F. H.
Acoustically swept rotor
[NASA-CASE-ARC-11106-1] c05 N80-14107

SCHNEIDER, R. T.
Non-equilibrium radiation nuclear reactor
[NASA-CASE-HQN-10841-1] c73 N78-19920
Safety flywheel
[NASA-CASE-HQN-10888-1] c44 N79-14527

SCHNEIDER, W. C.
Auger attachment method for insulation
[NASA-CASE-MSC-12615-1] c37 N76-19437
Diced tile thermal protection for spacecraft
[NASA-CASE-MSC-16366-1] c24 N79-23142

SCHMITZER, E.
Inflatable honeycomb Patent
[NASA-CASE-XLA-00204] c32 N70-36536
Manned space station Patent
[NASA-CASE-XLA-00258] c31 N70-36676
Method of making inflatable honeycomb Patent
[NASA-CASE-XLA-03492] c15 N71-22713

SCHNOPFER, H. W.
Dual purpose optical instrument capable of simultaneously acting as spectrometer and diffractometer
[NASA-CASE-XNP-05231] c14 N73-28491

SCHOEN, A. H.
Honeycomb panels formed of minimal surface periodic tubule layers
[NASA-CASE-ERC-10364] c18 N72-25540
Honeycomb core structures of minimal surface tubule sections
[NASA-CASE-ERC-10363] c18 N72-25541
Expandable space frames
[NASA-CASE-ERC-10365-1] c31 N73-32749

SCHOLL, J. A.
Method of forming shapes from planar sheets of thermosetting materials
[NASA-CASE-NPO-11036] c15 N72-24522

SCHONBURG, C.
Densification of porous refractory substrates
[NASA-CASE-MSC-18737-1] c25 N81-29180
Method of repairing surface damage to porous refractory substrates
[NASA-CASE-MSC-18736-1] c27 N81-29231

SCHORUM, S. W.
High speed binary to decimal conversion system Patent
[NASA-CASE-XGS-01230] c08 N71-19544

SCHRAEDER, J. H.
Multiple input radio receiver Patent
[NASA-CASE-XLA-00901] c07 N71-10775
Cooperative Doppler radar system Patent
[NASA-CASE-LAR-10403] c21 N71-11766
Apparatus for aiding a pilot in avoiding a midair collision between aircraft
[NASA-CASE-LAR-10717-1] c21 N73-30641

SCHREDER, K. D.
Broadband stable power multiplier Patent
[NASA-CASE-XNP-10854] c10 N71-26331

SCHUBERT, F. H.
Iodine generator for reclaimed water purification
[NASA-CASE-MSC-14632-1] c54 N78-14784

SCHUBERT, W. W.
Enhancement of in vitro Guayule propagation
[NASA-CASE-NPO-15213-1] c51 N81-29728

SCHUBERT, F. H.
Sprayable low density ablator and application process
[NASA-CASE-MPS-23506-1] c24 N78-24290

SCHULLER, F. T.
Journal bearings
[NASA-CASE-LEW-11076-1] c37 N74-21061
Journal Bearings
[NASA-CASE-LEW-11076-2] c37 N74-32921
Lubricated journal bearing
[NASA-CASE-LEW-11076-3] c37 N75-30562
Fluid journal bearings
[NASA-CASE-LEW-11076-4] c37 N76-15461

SCHULTE, D. F.
Heat pipes to reduce engine exhaust emissions
[NASA-CASE-LEW-12590-1] c25 N81-19245

SCHUMACHER, L. L.
Wide angle sun sensor
[NASA-CASE-NPO-13327-1] c35 N75-23910

SCHUSTER, D. H.
Antenna beam-shaping apparatus Patent
[NASA-CASE-XNP-00611] c09 N70-35219
Parabolic reflector horn feed with spillover correction Patent
[NASA-CASE-XNP-00540] c09 N70-35382
Insertion loss measuring apparatus having transformer means connected across a pair of bolometers Patent
[NASA-CASE-XNP-01193] c10 N71-16057

SCHUSTER, H. A.
Solid state television camera system Patent
[NASA-CASE-XNP-06092] c07 N71-24612

SCHUTT, J. B.
Alkali-metal silicate protective coating
[NASA-CASE-XGS-04119] c18 N69-39979
Fire resistant coating composition Patent
[NASA-CASE-GSC-10072] c18 N71-14014
Method for etching copper Patent
[NASA-CASE-XGS-06306] c17 N71-16044
Alkali metal silicate protective coating Patent
[NASA-CASE-XGS-04799] c18 N71-24183
Phototropic composition of matter
[NASA-CASE-XGS-03736] c14 N72-22443
Potassium silicate zinc coatings
[NASA-CASE-GSC-10361-1] c18 N72-23581
Ultraviolet light reflective coating
[NASA-CASE-GSC-11786-1] c24 N76-24363
Remote sensing of vegetation and soil using microwave ellipsometry
[NASA-CASE-GSC-11976-1] c43 N78-10529
Alkali-metal silicate binders and methods of manufacture
[NASA-CASE-GSC-12303-1] c24 N79-31347

SCHUTZHOFFER, L. A.
Apparatus for reducing aerodynamic noise in a wind tunnel
[NASA-CASE-MPS-23099-1] c09 N76-23273

SCHWAB, W. B.
 Closed loop spray cooling apparatus
 [NASA-CASE-LEW-11981-1] c31 N78-17237
 Closed loop spray cooling apparatus
 [NASA-CASE-LEW-11981-2] c34 N79-20336
SCHWARTZ, I. E.
 Abating exhaust noises in jet engines
 [NASA-CASE-ARC-10712-1] c07 N74-33218
SCHWABE, P. C.
 Saturation current protection apparatus for
 saturable core transformers Patent
 [NASA-CASE-ERC-10075] c09 N71-24800
 Unsaturating saturable core transformer Patent
 [NASA-CASE-ERC-10125] c09 N71-24893
 Saturation current protection apparatus for
 saturable core transformers
 [NASA-CASE-ERC-10075-2] c09 N72-22196
 Load-insensitive electrical device
 [NASA-CASE-XER-11046] c09 N72-22203
 Analog Signal to Discrete Time Interval
 Converter (ASDTIC)
 [NASA-CASE-ERC-10048] c09 N72-25251
 Controllable load insensitive power converters
 [NASA-CASE-ERC-10268] c09 N72-25252
 Load insensitive electrical device
 [NASA-CASE-XER-11046-2] c33 N74-22864
SCHWINGHAMER, R. J.
 Angular measurement system Patent
 [NASA-CASE-XMF-00447] c14 N70-33179
 Space vehicle electrical system Patent
 [NASA-CASE-XMF-00517] c03 N70-34157
 Electrical discharge apparatus for forming Patent
 [NASA-CASE-XMF-00375] c15 N70-34249
 Electro-optical alignment control system Patent
 [NASA-CASE-XMF-00908] c14 N70-40238
 Method and apparatus for precision sizing and
 joining of large diameter tubes Patent
 [NASA-CASE-XMF-05114] c15 N71-17650
 Magnetomotive metal working device Patent
 [NASA-CASE-XMF-03793] c15 N71-24833
 Method and apparatus for precision sizing and
 joining of large diameter tubes Patent
 [NASA-CASE-XMF-05114-3] c15 N71-24865
 Method and apparatus for precision sizing and
 joining of large diameter tubes Patent
 [NASA-CASE-XMF-05114-2] c15 N71-26148
SCHWUTKE, G. H.
 Growth of silicon carbide crystals on a seed
 while pulling silicon crystals from a melt
 [NASA-CASE-NPO-13969-1] c76 N79-23798
SCIACCA, T. P.
 Device for measuring electron-beam intensities
 and for subjecting materials to electron
 irradiation in an electron microscope
 [NASA-CASE-XGS-01725] c14 N69-35982
SCOGGINS, J. R.
 Meteorological balloon Patent
 [NASA-CASE-XMF-04163] c02 N71-23007
SCOPELIANOS, A. G.
 Process for the preparation of
 polycarbonylphosphazenes
 [NASA-CASE-ARC-11176-2] c27 N81-27271
SCOTT, C. E.
 Magnifying scratch gage force transducer
 [NASA-CASE-LAR-10496-1] c14 N72-22437
SCOTT, C. E.
 Inflatable transpiration cooled nozzle
 [NASA-CASE-MFS-20619] c28 N72-11708
SCOTT, D. R.
 Electrical self-aligning connector
 [NASA-CASE-MFS-25211-1] c33 N80-32651
 Solar tracking system
 [NASA-CASE-MFS-23999-1] c44 N81-24520
SCOTT, R. P.
 Burrowing apparatus
 [NASA-CASE-XMF-07169] c15 N73-32362
SCOTT, R. R.
 Solar cell including second surface mirrors Patent
 [NASA-CASE-NPO-10109] c03 N71-11049
SCOTT, S. G.
 Nonmagnetic thermal motor for a magnetometer
 [NASA-CASE-XAR-03786] c09 N69-21313
SCOTT, W. L.
 Tactile sensing means for prosthetic limbs
 [NASA-CASE-MFS-16570-1] c05 N73-32013
SCOW, J.
 Multiple circuit switch apparatus with improved
 pivot actuator structure Patent
 [NASA-CASE-XAC-03777] c10 N71-15909
SCROOP, P. B.
 Relief container
 [NASA-CASE-XMS-06761] c05 N69-23192
SCUDDER, L. R.
 Application of semiconductor diffusants to solar
 cells by screen printing
 [NASA-CASE-LEW-12775-1] c44 N79-11468
SCULLY, P. T.
 Collapsible reflector Patent
 [NASA-CASE-XMS-03454] c09 N71-20658
SEA, R. G.
 Junction range finder
 [NASA-CASE-KSC-10108] c14 N73-25461
SEAMAN, C. B.
 Method and apparatus for Doppler frequency
 modulation of radiation
 [NASA-CASE-NFO-14524-1] c32 N80-24510
SEATON, A. F.
 Phase multiplying electronic scanning system
 Patent
 [NASA-CASE-NPO-10302] c10 N71-26142
 Virtual wall slot circularly polarized planar
 array antenna
 [NASA-CASE-NPO-10301] c07 N72-11148
 Conical reflector antenna
 [NASA-CASE-NPO-10303] c07 N72-22127
SEATON, S. L.
 Electrostatic plasma modulator for space vehicle
 re-entry communication Patent
 [NASA-CASE-XLA-01400] c07 N70-41331
 Means for communicating through a layer of
 ionized gases Patent
 [NASA-CASE-XLA-01127] c07 N70-41372
 Method for measuring the characteristics of a
 gas Patent
 [NASA-CASE-XLA-03375] c16 N71-24074
 Laser calibrator Patent
 [NASA-CASE-XLA-03410] c16 N71-25914
SEAY, B. P., JR.
 Burst synchronization detection system Patent
 [NASA-CASE-XMS-05605-1] c10 N71-19468
SEBACHER, D. I.
 Solar hydrogen generator
 [NASA-CASE-LAR-11361-1] c44 N77-22607
SECKEL, E.
 Integrated lift/drag controller for aircraft
 [NASA-CASE-ARC-10456-1] c05 N75-12930
SECRETAN, L.
 Rotary bead dropper and selector for testing
 micrometeorite detectors Patent
 [NASA-CASE-XGS-03304] c09 N71-22988
SEEGMILLER, H. L. B.
 Inertia diaphragm pressure transducer Patent
 [NASA-CASE-XAC-02981] c14 N71-21072
SEIDEL, B. L.
 Antenna feed system for receiving circular
 polarization and transmitting linear
 polarization
 [NASA-CASE-NFO-14362-1] c32 N80-16261
SEIDENBERG, B.
 Method and apparatus for determining the
 contents of contained gas samples
 [NASA-CASE-GSC-10903-1] c14 N73-12444
 Low outgassing polydimethylsiloxane material and
 preparation thereof
 [NASA-CASE-GSC-11358-1] c06 N73-26100
SEILER, E. E.
 Method for leakage testing of tanks Patent
 [NASA-CASE-XMF-02392] c32 N71-24285
SEITZ, T. E.
 Heat activated cell with alkali anode and alkali
 salt electrolyte Patent
 [NASA-CASE-LEW-11358] c03 N71-26084
SEITZINGER, V. F.
 Unfired-ceramic flame-resistant insulation and
 method of making the same Patent
 [NASA-CASE-XMF-01030] c18 N70-41583
 Ceramic insulation for radiant heating
 environments and method of preparing the same
 Patent
 [NASA-CASE-MFS-14253] c33 N71-24858
SELCOK, H. K.
 Solar energy collection system
 [NASA-CASE-NPO-13810-1] c44 N77-32582
 Non-tracking solar energy collector system
 [NASA-CASE-NPO-13813-1] c44 N78-31526
 Non-tracking solar energy collector system
 [NASA-CASE-NPO-13817-1] c44 N79-11471

- Solar energy receiver for a Stirling engine
[NASA-CASE-NPO-14619-1] c44 N81-17518
- SELLER, J. H., JR.
Apparatus for field strength measurement of a space vehicle Patent
[NASA-CASE-XLE-00820] c14 N71-16014
Apparatus for measuring electric field strength on the surface of a model vehicle Patent
[NASA-CASE-XLE-02038] c09 N71-16086
- SENNOTT, J. W.
Navigation system and method
[NASA-CASE-GSC-12508-1] c04 N81-26085
- SENSEMY, H. M.
Fire extinguishing apparatus having a slidable mass for a penetrator nozzle
[NASA-CASE-KSC-11064-1] c31 N81-14137
- SERAFINI, T. T.
Preparation of polyimides from mixtures of monomeric diamines and esters of polycarboxylic acids
[NASA-CASE-LEW-11325-1] c06 N73-27980
Low temperature cross linking polyimides
[NASA-CASE-LEW-12876-1] c27 N80-26447
Curing agent for polyepoxides and epoxy resins and composites cured therewith
[NASA-CASE-LEW-13226-1] c27 N81-17260
Composition and method for making polyimide resin-reinforced fabric
[NASA-CASE-LEW-12933-1] c27 N81-19296
- SEWARD, H. H.
Compact spectroradiometer
[NASA-CASE-HQN-10683] c14 N71-34389
Two color horizon sensor
[NASA-CASE-ERC-10174] c14 N72-25409
- SEYFFERT, H. B.
Controlled glass bead peening Patent
[NASA-CASE-XLA-07390] c15 N71-18616
- SEYL, J. W.
Dynamic Doppler simulator Patent
[NASA-CASE-XMS-05454-1] c07 N71-12391
- SHADY, D. L.
Device for tensioning test specimens within an hermetically sealed chamber
[NASA-CASE-MFS-23281-1] c35 N77-22450
- SHAFFER, D. H.
Analog to digital converter for two-dimensional radiant energy array computers
[NASA-CASE-GSC-11839-3] c60 N77-32731
- SHAFFER, J. I.
Solid propellant rocket motor nozzle
[NASA-CASE-NPO-11458] c28 N72-23810
Solid propellant rocket motor
[NASA-CASE-NPO-11559] c28 N73-24784
Preparing oxidizer coated metal fuel particles
[NASA-CASE-NPO-11975-1] c28 N74-33209
Solid propellant motor
[NASA-CASE-NPO-11458A] c20 N78-32179
- SHAFPER, C. V.
Active RC networks
[NASA-CASE-ARC-10042-2] c10 N72-11256
Multiloop RC active filter apparatus having low parameter sensitivity with low amplifier gain
[NASA-CASE-ARC-10192] c09 N72-21245
- SHAI, C. M.
Alkali-metal silicate protective coating
[NASA-CASE-XGS-04119] c18 N69-39979
Alkali metal silicate protective coating Patent
[NASA-CASE-XGS-04799] c18 N71-24183
- SHAI, H. C.
Electrically conductive thermal control coatings
[NASA-CASE-GSC-12207-1] c24 N79-14156
- SHALHOUB, I. M.
The 1,2,4-oxadiazole elastomers
[NASA-CASE-ARC-11253-1] c27 N81-17262
Bifunctional monomers having terminal oxime and cyano or amidine groups
[NASA-CASE-ARC-11253-3] c27 N81-24256
- SHALTENS, B. K.
Method and apparatus for sputtering utilizing an apertured electrode and a pulsed substrate bias
[NASA-CASE-LEW-10920-1] c17 N73-24569
- SHANKAR, N. K.
Ultrastable calibrated light source
[NASA-CASE-MSC-12293-1] c14 N72-27411
- SHANKS, G. C.
Compression test fixture
[NASA-CASE-MSC-18723-1] c39 N81-24470
- SHANNON, R. L.
plasma cleaning device
[NASA-CASE-MFS-22906-1] c75 N78-27913
- SHAPIRO, H.
Omni-directional anisotropic molecular trap Patent
[NASA-CASE-XGS-00783] c30 N71-17788
Trap for preventing diffusion pump backstreaming
[NASA-CASE-GSC-10518-1] c15 N72-22489
- SHARMA, H.
Optical crystal temperature gauge with fiber optic connections
[NASA-CASE-MSC-18627-1] c74 N81-15818
Apparatus for fiber optic liquid level sensing
[NASA-CASE-MSC-18674-1] c74 N81-24907
- SHARPE, H. B.
Stainless steel panel for selective absorption of solar energy and the method of producing said panel
[NASA-CASE-MFS-23518-2] c44 N77-31611
Sprayable low density ablator and application process
[NASA-CASE-MFS-23506-1] c24 N78-24290
Method for making an aluminum or copper substrate panel for selective absorption of solar energy
[NASA-CASE-MFS-23518-1] c44 N79-11469
Aluminum or copper substrate panel for selective absorption of solar energy
[NASA-CASE-MFS-23518-3] c44 N80-16452
Cork-resin ablative insulation for complex surfaces and method for applying the same
[NASA-CASE-MFS-23626-1] c24 N80-26388
- SHATAZSKY, B.
Tape guidance system and apparatus for the provision thereof Patent
[NASA-CASE-XNP-09453] c08 N71-19420
- SHATTUCK, R. D.
Protection of serially connected solar cells against open circuits by the use of shunting diode Patent
[NASA-CASE-XLE-04535] c03 N71-23354
- SHAW, C. S.
Exhaust flow deflector
[NASA-CASE-LAR-11570-1] c34 N76-18364
- SHAW, D. S.
Metric half-span model support system
[NASA-CASE-LAR-12441-1] c09 N80-24334
- SHAW, G. C.
Process for the leaching of AP from propellant
[NASA-CASE-NFO-14109-1] c28 N80-23471
Recovery of aluminum from composite propellants
[NASA-CASE-NPO-14110-1] c28 N81-15119
- SHEETS, B. E.
Detector absorptivity measuring method and apparatus
[NASA-CASE-LAR-10907-1] c35 N76-29551
- SHEPHERD, P. K.
Method and apparatus for distillation of liquids Patent
[NASA-CASE-XNP-08124] c15 N71-27184
Method for distillation of liquids
[NASA-CASE-XNP-08124-2] c06 N73-13129
- SHERBLEY, D. W.
Gels as battery separators for soluble electrode cells
[NASA-CASE-LEW-12364-1] c44 N77-22606
Formulated plastic separators for soluble electrode cells
[NASA-CASE-LEW-12358-2] c25 N78-25149
Inorganic-organic separators for alkaline batteries
[NASA-CASE-LEW-12649-1] c44 N78-25530
Formulated plastic separators for soluble electrode cells
[NASA-CASE-LEW-12358-1] c44 N79-17313
In situ self cross-linking of polyvinyl alcohol battery separators
[NASA-CASE-LEW-12972-1] c44 N79-25481
Method of cross-linking polyvinyl alcohol and other water soluble resins
[NASA-CASE-LEW-13103-1] c27 N80-32516
Advanced inorganic separators for alkaline batteries and method of making same
[NASA-CASE-LEW-13171-1] c44 N81-22466
In-situ cross linking of polyvinyl alcohol
[NASA-CASE-LEW-13135-2] c27 N81-24257
Cross-linked polyvinyl alcohol and method of making same
[NASA-CASE-LEW-13504-1] c27 N81-27279
Additive for zinc electrodes
[NASA-CASE-LEW-13286-1] c44 N81-27597

Polyvinyl alcohol battery separator containing inert filler
[NASA-CASE-LEW-13556-1] c44 N81-27615

Cross-linked polyvinyl alcohol and method of making same
[NASA-CASE-LEW-13101-2] c23 N81-25160

Alkaline battery containing a separator of a cross-linked copolymer of vinyl alcohol and unsaturated carboxylic acid
[NASA-CASE-LEW-13102-1] c44 N81-29531

SHELPUK, B.
Double-sided solar cell package
[NASA-CASE-NPO-14199-1] c44 N79-25482

SHELTON, G. B.
Notch filter
[NASA-CASE-MFS-23303-1] c32 N77-18307

System for the measurement of ultra-low stray light levels
[NASA-CASE-MFS-23513-1] c74 N79-11865

SHELTON, J. P., JR.
Monopulse tracking system Patent
[NASA-CASE-XGS-01155] c10 N71-21483

SHELTON, R. D.
Electron beam instrument for measuring electric fields Patent
[NASA-CASE-INP-10289] c14 N71-23699

SHEPARD, C. B.
Electric arc apparatus Patent
[NASA-CASE-IAC-01677] c09 N71-20816

SHEPARD, L. F.
Space suit
[NASA-CASE-MSC-12609-1] c05 N73-32012

SHEPARD, M. P., JR.
Solar cell module
[NASA-CASE-NPO-14467-1] c44 N79-31753

SHEPARD, S. K.
Peak polarity selector Patent
[NASA-CASE-FBC-10010] c10 N71-24862

SHER, A.
Photocapacitive image converter
[NASA-CASE-LAR-12513-1] c33 N60-28635

SHERBURN, A. E.
Capacitive tank gaging apparatus being independent of liquid distribution
[NASA-CASE-MFS-21629] c14 N72-22442

SHERREY, J. M.
Bonded elastomeric seal for electrochemical cells Patent
[NASA-CASE-XGS-02631] c03 N71-23006

Frangible electrochemical cell
[NASA-CASE-XGS-10010] c03 N72-15986

Process for making sheets with parallel pores of uniform size
[NASA-CASE-GSC-10984-1] c37 N75-26371

SHERMAN, A.
Annular slit colloid thruster Patent
[NASA-CASE-GSC-10709-1] c28 N71-25213

SHERWIN, E. J.
Bonding thermoelectric elements to nonmagnetic refractory metal electrodes
[NASA-CASE-XGS-04554] c15 N69-35786

SHETH, S.
Flame retardant spandex type polyurethanes
[NASA-CASE-MSC-14331-2] c27 N78-17213

Process for spinning flame retardant elastomeric compositions
[NASA-CASE-MSC-14331-3] c27 N78-32262

SHETH, S. G.
Non-flammable elastomeric fiber from a fluorinated elastomer and containing an halogenated flame retardant
[NASA-CASE-MSC-14331-1] c27 N76-24405

SHEWMAKE, G. A.
Life raft Patent
[NASA-CASE-XMS-00863] c05 N70-34857

Life preserver Patent
[NASA-CASE-XMS-00864] c05 N70-36493

Inflatable radar reflector unit Patent
[NASA-CASE-XMS-00893] c07 N70-40063

Rescue litter flotation assembly Patent
[NASA-CASE-XMS-04170] c05 N71-22748

SHIBBER, B.
Prestressed refractory structure Patent
[NASA-CASE-INP-02888] c18 N71-21068

SHIGEMOTO, F. H.
Laser fluid velocity detector Patent
[NASA-CASE-IAC-10770-1] c16 N71-24828

SHILLINGER, G. L., JR.
Spring operated accelerator and constant force spring mechanism therefor
[NASA-CASE-ARC-10898-1] c35 N77-18417

SHIM, I. H.
Recorder/processor apparatus
[NASA-CASE-GSC-11553-1] c35 N74-15831

SHIMA, R.
Multitarget sequential sputtering apparatus
[NASA-CASE-NFO-13345-1] c37 N75-19684

SHIMADA, K.
Thermionic diode switch Patent
[NASA-CASE-NFO-10404] c03 N71-12255

Cavity emitter for thermionic converter Patent
[NASA-CASE-NFO-10412] c09 N71-28421

Thermal to electrical power conversion system with solid-state switches with Seebeck effect compensation
[NASA-CASE-NFO-11388] c03 N72-23048

Electric power generation system directory from laser power
[NASA-CASE-NFO-13308-1] c36 N75-30524

Thermostatically controlled non-tracking type solar energy concentrator
[NASA-CASE-NPO-13497-1] c44 N76-14602

SHIMANSKY, R. A.
Safety shield for vacuum/pressure chamber viewing port
[NASA-CASE-GSC-12513-1] c31 N81-19343

SHIMIZU, H.
Non-invasive method and apparatus for measuring pressure within a pliable vessel
[NASA-CASE-ARC-11264-1] c52 N81-33804

SHIMODA, K.
Method and apparatus for stabilizing a gaseous optical maser Patent
[NASA-CASE-XGS-03644] c16 N71-18614

SHIRA, C. S.
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Mass spectrometer with magnetic pole pieces providing the magnetic fields for both the magnetic sector and an ion-type vacuum pump
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- SIEVERS, M. W.
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- SIGFRED, J.
Length controlled stabilized mode-lock Nd:YAG laser
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- SIGNORELLI, R. A.
Reinforced metallic composites Patent
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- Method of making fiber composites
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- SIKORA, P. P.
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- SIKORRA, D. J.
Apparatus for overcurrent protection of a push-pull amplifier Patent
[NASA-CASE-MSC-12033-1] c09 N71-13531
- SILVER, E. H.
Means and method of measuring viscoelastic strain Patent
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[NASA-CASE-NPO-13519-1] c33 N76-19338
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[NASA-CASE-NFO-13644-1] c52 N76-29895
Catheter tip force transducer for cardiovascular research
[NASA-CASE-NFO-13643-1] c52 N76-29896
- SILVERMAN, J. R.
Programmable telemetry system Patent
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- SILVERTSON, W. E., JR.
Logical function generator
[NASA-CASE-XLA-05099] c09 N73-13209
- SIMAS, V. R.
Optimum predetection diversity receiving system Patent
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- SIMMONDS, M. E.
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- SIMMONDS, P. G.
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- SIMMONS, W. E.
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[NASA-CASE-XMS-02532] c15 N70-41808
- SINOW, M. K.
Data-aided carrier tracking loops
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- SIMON, S. L.
Temperature reducing coating for metals subject to flame exposure Patent
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- SIMPKINS, L. G.
Television multiplexing system
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- SIMPSON, J. G.
Solar concentrator
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- SIMPSON, W. E.
Radiator deployment actuator Patent
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- SIMPSON, W. G.
Space environmental work simulator Patent
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[NASA-CASE-MFS-20299] c15 N72-11392
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SIMS, C. B.
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SINCLAIR, A. B.
Ablation sensor Patent
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[NASA-CASE-LAR-11213-1] c35 N75-15014

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SIROCKY, P. J.
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SIVERTSON, W. E., JR.
Adaptive compression of communication signals Patent
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Micrometeoroid penetration measuring device Patent
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SIVLEY, J. B.
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SIZEMORE, K. O.
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SLAYDEN, M. D.
Pulse amplitude and width detector Patent
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[NASA-CASE-XNP-08804] c09 N71-24717

SLEEHAN, W. C., JR.
Control for flexible parawing Patent
[NASA-CASE-XLA-06958] c02 N71-11038

SLERP, W. S.
Particulate and solar radiation stable coating for spacecraft
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SLIPER, L. W., JR.
Solar cell and circuit array and process for nullifying magnetic fields Patent
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SLOWIKOWSKI, D. P.
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SMALL, W. J.
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Programmable scan/read circuitry for charge coupled device imaging detectors
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Curved centerline air intake for a gas turbine engine
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Barium release system
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Digital computing cardiometer
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SMITH, J. A.
Thermal insulation protection means
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SMITH, J. G.
Satellite personal communications system
[NASA-CASE-NPO-14480-1] c32 N80-20448

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Energy management system for glider type vehicle Patent
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Balanced bellows spirometer
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Silica reusable surface insulation
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[NASA-CASE-ARC-11310-1] c27 N80-23454

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[NASA-CASE-XNF-04494-1] c33 N79-33392

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Display research collision warning system
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SHYLY, B. M.
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SNYDER, L. M.
Particle detection apparatus including a
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Automated fluid chemical analyzer Patent
[NASA-CASE-XNP-09451] c06 N71-26754

SOHL, G.
Focussing system for an ion source having
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SOINI, H. E.
Apparatus for measuring thermal conductivity
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SOKOLOWSKI, D. E.
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SOLOMON, G.
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SOPELIANOS, A. G.
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Electric arc device for heating gases Patent
[NASA-CASE-XAC-00319] c25 N70-41628

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Wind tunnel flow generation section
[NASA-CASE-AEC-10710-1] c09 N75-12969
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[NASA-CASE-ARC-10761-1] c07 N77-18154
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[NASA-CASE-ARC-10977-1] c07 N80-32392

SOTER, B. J.
Modification of one man life raft
[NASA-CASE-LAR-10241-1] c54 N74-14845

SOTHERLUND, A. W., JR.
Single action separation mechanism Patent
[NASA-CASE-XLA-00188] c15 N71-22874

SOURS, W. F.
Minimech self-deploying boom mechanism
[NASA-CASE-GSC-10566-1] c15 N72-18477

SOVEY, J. S.
Modification of the electrical and optical
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[NASA-CASE-LEW-13359-1] c27 N81-24265
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[NASA-CASE-LEW-12919-1] c24 N81-27198

SOHA, W. W.
Inflatable transpiration cooled nozzle
[NASA-CASE-MFS-20619] c28 N72-11708

SPADY, A. A., JR.
Backpack carrier Patent
[NASA-CASE-LAR-10056] c05 N71-12351
Reduced gravity simulator Patent
[NASA-CASE-XLA-01787] c11 N71-16028

SPAIN, I. L.
Hall effect magnetometer
[NASA-CASE-LEW-11632-2] c35 N75-13213

SPALVINS, T.
Deposition of alloy films
[NASA-CASE-LEW-11262-1] c27 N74-13270

SPANG, B. A., III
Apparatus for sensor failure detection and
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[NASA-CASE-LEW-12907-2] c07 N81-19115

SPARKS, R. H.
Fifth wheel
[NASA-CASE-FRC-10081-1] c37 N77-14477

SPEARMAN, H. L.
Translating horizontal tail Patent
[NASA-CASE-XLA-08801-1] c02 N71-11043

SPEISER, R. C.
Focussing system for an ion source having
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[NASA-CASE-XNP-03332] c09 N71-10618

SPENCER, B., JR.
Variable geometry manned orbital vehicle Patent
[NASA-CASE-XLA-03691] c31 N71-15674

SPENCER, D. J.
Data compression system with a minimum time
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[NASA-CASE-XNP-08832] c08 N71-12506
SPENCER, J. L.
 Electronic strain-level counter
 [NASA-CASE-LAB-10756-1] c32 N73-26510
SPENCER, R. E.
 Radiation direction detector including means for
 compensating for photocell aging Patent
 [NASA-CASE-XLA-00183] c14 N70-40239
SPENCER, R. L.
 Thickness measuring and injection device Patent
 [NASA-CASE-MFS-20261] c14 N71-27005
 Ultrasonic scanner for radial and flat panels
 [NASA-CASE-MFS-20335-1] c35 N74-10415
SPENCER, R. S.
 Method of treating the surface of a glass member
 [NASA-CASE-GSC-12110-1] c27 N77-32308
 Safety shield for vacuum/pressure chamber
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 [NASA-CASE-GSC-12513-1] c31 N81-19343
SPIER, R. A.
 Portable milling tool Patent
 [NASA-CASE-XMF-03511] c15 N71-22799
 Restraint system for ergometer
 [NASA-CASE-MFS-21046-1] c14 N73-27377
 Tilting table for ergometer and for other
 biomedical devices
 [NASA-CASE-MFS-21010-1] c05 N73-30078
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 [NASA-CASE-MFS-20730-1] c39 N74-13131
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 Observation window for a gas confining chamber
 [NASA-CASE-NPO-10890] c11 N73-12265
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 Process for the preparation of calcium superoxide
 [NASA-CASE-ARC-11053-1] c25 N79-10162
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 [NASA-CASE-ARC-11245-1] c33 N80-11326
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 Evaporant holder
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 Exposure interlock for oscilloscope cameras
 [NASA-CASE-LAB-10319-1] c14 N73-32322
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 Method of making a diffusion bonded refractory
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 [NASA-CASE-XLE-01604-2] c15 N71-15610
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 Method of forming a wick for a heat pipe
 [NASA-CASE-NPO-13391-1] c34 N76-27515
SPRINGER, L. E.
 Digital data reformatter/deserializer
 [NASA-CASE-NPO-13676-1] c60 N79-20751
SPRINGETT, J. C.
 Phase-shift data transmission system having a
 pseudo-noise SYNC code modulated with the data
 in a single channel Patent
 [NASA-CASE-XNP-00911] c08 N70-41961
 Audio system with means for reducing noise effects
 [NASA-CASE-NPO-11631] c10 N73-12244
SPRINGFIELD, C. L.
 Flammability test chamber Patent
 [NASA-CASE-KSC-10126] c11 N71-24985
 Autoignition test cell Patent
 [NASA-CASE-KSC-10198] c11 N71-28629
SPROSS, P. R.
 Biological isolation garment Patent
 [NASA-CASE-GSC-12206-1] c05 N71-17599
SPUCK, W. B., III
 Borehole geological assessment
 [NASA-CASE-NPO-14231-1] c46 N80-10709
SQUILLARI, W.
 System for stabilizing torque between a balloon
 and gondola
 [NASA-CASE-GSC-11077-1] c02 N73-13008
SQUYERS, R. P.
 Uniform variable light source
 [NASA-CASE-NPO-11429-1] c74 N77-21941
ST. CLAIR, A. E.
 Crystalline polyimides
 [NASA-CASE-LAB-12099-1] c27 N80-16158
 Electrically conductive palladium containing
 polyimide films
 [NASA-CASE-LAB-12705-1] c33 N80-24549
 Process for preparing high temperature polyimide
 film laminates
 [NASA-CASE-LAB-12742-1] c24 N81-12174
ST. CLAIR, T. L.
 Crystalline polyimides
 [NASA-CASE-LAB-12099-1] c27 N80-16158
 Process for preparing high temperature polyimide
 film laminates
 [NASA-CASE-LAB-12742-1] c24 N81-12174
 Method for preparing addition type polyimide
 prepregs
 [NASA-CASE-LAB-12054-2] c27 N81-14078
 Thermoset-thermoplastic aromatic polyamides
 [NASA-CASE-LAB-12723-1] c27 N81-15107
 Tackifier for addition polyimides containing
 monoethylphthalate
 [NASA-CASE-LAB-12642-1] c27 N81-29229
STALEY, S. D.
 Quick attach and release fluid coupling assembly
 Patent
 [NASA-CASE-XKS-01985] c15 N71-10782
STAINBACK, J. D.
 Exposure interlock for oscilloscope cameras
 [NASA-CASE-LAB-10319-1] c14 N73-32322
STALEY, R. W.
 Pulse amplitude and width detector Patent
 [NASA-CASE-XMF-06519] c09 N71-12519
 Pulse rise time and amplitude detector Patent
 [NASA-CASE-XMF-08804] c09 N71-24717
STALEY, R. W.
 Exposure system for animals Patent
 [NASA-CASE-YAC-05333] c11 N71-22875
STALLCOP, J. R.
 Measurement of plasma temperature and density
 using radiation absorption
 [NASA-CASE-ARC-10598-1] c75 N74-30156
STALOFF, C.
 Frequency shift keyed demodulator Patent
 [NASA-CASE-XGS-02889] c07 N71-11282
STAMPS, J. C.
 Television noise reduction device
 [NASA-CASE-MSC-12607-1] c32 N75-21485
STANGE, W. C.
 Cyclical bi-directional rotary actuator
 [NASA-CASE-GSC-11883-1] c37 N77-19458
 Actuator mechanism
 [NASA-CASE-GSC-11883-2] c37 N78-31426
STANLEY, A. G.
 Method for analyzing radiation sensitivity of
 integrated circuits
 [NASA-CASE-NFO-14350-1] c33 N80-14332
STARK, K. W.
 Endless tape cartridge Patent
 [NASA-CASE-XGS-00769] c14 N70-41647
 Endless tape transport mechanism Patent
 [NASA-CASE-XGS-01223] c07 N71-10609
 Annular slit colloid thruster Patent
 [NASA-CASE-GSC-10709-1] c28 N71-25213
 Micro-pound extended range thrust stand Patent
 [NASA-CASE-GSC-10710-1] c28 N71-27094
STARK, R. W.
 Solid propellant liner Patent
 [NASA-CASE-XNP-09744] c27 N71-16392
STARKEY, D. J.
 Torsional disconnect unit
 [NASA-CASE-NFO-10704] c15 N72-20445
STARNER, R. R.
 Frequency measurement by coincidence detection
 with standard frequency
 [NASA-CASE-MSC-14649-1] c33 N76-16331
STATTEL, R. J.
 Memory-based frame synchronizer
 [NASA-CASE-GSC-12430-1] c32 N80-20453
 Memory-based parallel data output controller
 [NASA-CASE-GSC-12447-1] c60 N80-21987
STCLAIR, T. L.
 Polyimide adhesives
 [NASA-CASE-LAB-12181-1] c27 N78-17205
STCLAIRE, T. L.
 Mixed diamines for lower melting addition
 polyimide preparation and utilization
 [NASA-CASE-LAB-12054-1] c27 N79-33316
STECURA, S.
 Thermal barrier coating system
 [NASA-CASE-LEW-12554-1] c34 N78-18355
STEELE, R. E.
 Satellite aided vehicle avoidance system Patent
 [NASA-CASE-ERC-10090] c21 N71-24948
 Satellite aided vehicle avoidance system
 [NASA-CASE-ERC-10419-1] c03 N75-30132
STEELE, R. E.
 Method and apparatus for nondestructive testing
 of pressure vessels
 [NASA-CASE-NFO-12142-1] c38 N76-28563

STEENHAGEN, G.
Expansible support means
[NASA-CASE-NPO-11059] c15 N72-17454

STERNEEN, J.
Relief valve
[NASA-CASE-XMS-05894-1] c15 N69-21924

STEIN, R. J.
Continuous detonation reaction engine Patent
[NASA-CASE-XMF-06926] c28 N71-22983
Coal-shale interface detection
[NASA-CASE-MFS-23720-3] c43 N79-25443

STEIN, R. M.
A system for concurrently delivering a stream of powdered fuel and a stream of powdered oxidizer to a combustion chamber for a reaction motor
[NASA-CASE-MFS-23904-1] c20 N79-13077

STEIN, S.
Injector-valve device Patent
[NASA-CASE-XLE-00303] c15 N70-36535
Rocket engine injector Patent
[NASA-CASE-XLE-00111] c28 N70-38199
Rocket engine injector Patent
[NASA-CASE-XLE-03157] c28 N71-24736

STEINBERG, R.
Molecular beam velocity selector Patent
[NASA-CASE-XLE-01533] c11 N71-10777
Method of forming metal hydride films
[NASA-CASE-LEW-12083-1] c37 N78-13436

STEINMETZ, C. P.
Energy limiter for hydraulic actuators Patent
[NASA-CASE-ARC-10131-1] c15 N71-27754

STELBEN, J. J.
Recorder/processor apparatus
[NASA-CASE-GSC-11553-1] c35 N74-15831

STELL, R. E.
In situ transfer standard for ultrahigh vacuum gage calibration
[NASA-CASE-LAR-10862-1] c35 N74-15092

STELLA, A. J.
Electrical connector pin with wiping action
[NASA-CASE-XMF-04238] c09 N69-35734

STELTS, P. D.
Low heat leak connector for cryogenic system
[NASA-CASE-XLE-02367-1] c31 N79-21225

STELZMIED, C. T.
Reflectometer for receiver input impedance match measurement Patent
[NASA-CASE-XNP-10843] c07 N71-11267
Multi-feed cone Cassegrain antenna Patent
[NASA-CASE-NPO-10539] c07 N71-11285
Matched thermistors for microwave power meters Patent
[NASA-CASE-NPO-10348] c10 N71-12554
Broadband microwave waveguide window Patent
[NASA-CASE-XNP-08880] c09 N71-24808
Rotary vane attenuator wherein rotor has orthogonally disposed resistive and dielectric cards
[NASA-CASE-NPO-11418-1] c14 N73-13420

STENGARD, E. O.
Toggle mechanism for pinching metal tubes
[NASA-CASE-GSC-12274-1] c37 N79-28550

STENGEL, E. F.
Wind velocity probing device and method Patent
[NASA-CASE-XLA-02081] c20 N71-16281

STENLUND, S. J.
Rotating mandrel for assembly of inflatable devices Patent
[NASA-CASE-XLA-04143] c15 N71-17687
Traveling sealer for contoured table Patent
[NASA-CASE-XLA-01494] c15 N71-24164

STEPHANS, J. B.
Low cost solar energy collection system
[NASA-CASE-NPO-13579-1] c44 N78-17460

STEPHENS, D. G.
Flexible ring slosh damping baffle Patent
[NASA-CASE-LAR-10317-1] c32 N71-16103
Instrument for measuring the dynamic behavior of liquids Patent
[NASA-CASE-XLA-05541] c12 N71-26387
Active vibration isolator for flexible bodies Patent
[NASA-CASE-LAR-10106-1] c15 N71-27169
Ride quality meter
[NASA-CASE-LAR-12882-1] c54 N81-31848

STEPHENS, D. L.
Automatic closed circuit television arc guidance control Patent

[NASA-CASE-MFS-13046] c07 N71-19433

STEPHENS, J. B.
Microbalance including crystal oscillators for measuring contaminants in a gas system Patent
[NASA-CASE-NFO-10144] c14 N71-17701
Space simulator Patent
[NASA-CASE-NPO-10141] c11 N71-24964
Sampler of gas borne particles
[NASA-CASE-NPO-13396-1] c35 N76-18401
Wind sensor
[NASA-CASE-NPO-13462-1] c35 N76-24524
Cryostat system for temperatures on the order of 2 deg K or less
[NASA-CASE-NPO-13459-1] c31 N77-10229
Underground mineral extraction
[NASA-CASE-NPO-14140-1] c31 N78-24387
Solar pond
[NASA-CASE-NPO-13581-2] c44 N78-31525
Primary reflector for solar energy collection systems
[NASA-CASE-NFO-13579-4] c44 N79-14529
Primary reflector for solar energy collection systems and method of making same
[NASA-CASE-NPO-13579-3] c44 N79-24432
Solar energy collection system
[NASA-CASE-NPO-13579-2] c44 N79-24433
Low cost cryostat
[NASA-CASE-NFO-14513-1] c35 N81-14287
Underground mineral extraction
[NASA-CASE-NPO-14140-1] c43 N81-26509

STEPHENS, J. E.
High toughness-high strength iron alloy
[NASA-CASE-LEW-12542-1] c26 N77-24254
Process for making a high toughness-high strength iron alloy
[NASA-CASE-LEW-12542-2] c26 N79-22271
High toughness-high strength iron alloy
[NASA-CASE-LEW-12542-3] c26 N80-32484

STERN, N.
Reversible current control apparatus Patent
[NASA-CASE-XLA-09371] c10 N71-18724

STERRITT, J. E.
Laser grating interferometer Patent
[NASA-CASE-XLA-04295] c16 N71-24170

STETSON, A. R.
Silicide coatings for refractory metals Patent
[NASA-CASE-XLE-10910] c18 N71-29040

STEUDEL, E. M.
Controlled caging and uncaging mechanism
[NASA-CASE-GSC-11063-1] c37 N77-27400

STEVENS, M. L.
Surface conforming thermal/pressure seal
[NASA-CASE-MSC-18422-1] c37 N80-14400

STEVENS, M. R.
Portable electrophoresis apparatus using minimum electrolyte
[NASA-CASE-NPO-13274-1] c25 N79-10163

STEVENSON, L. E.
Aircraft control system
[NASA-CASE-BRC-10439] c02 N73-19004

STEWART, C. H.
Family of frequency to amplitude converters
[NASA-CASE-MSC-12395] c09 N72-25257
Apparatus for statistical time-series analysis of electrical signals
[NASA-CASE-MSC-12428-1] c10 N73-25240

STEWART, D. A.
Adjustable high emittance gap filler
[NASA-CASE-ARC-11310-1] c27 N80-23454

STEWART, R. B.
Apparatus and method for generating large mass flow of high temperature air at hypersonic speeds
[NASA-CASE-LAR-10612-1] c12 N73-28144

STEWART, W. L.
Multistage multiple-reentry turbine Patent
[NASA-CASE-XLE-00170] c15 N70-36412
Multistage multiple-reentry turbine Patent
[NASA-CASE-XLE-00085] c28 N70-39895
Supercharged topping rocket propellant feed system
[NASA-CASE-XLE-02062-1] c20 N80-14188

STICKLE, J. W.
Direct lift control system Patent
[NASA-CASE-LAR-10249-1] c02 N71-26110

STIFFLER, J. J.
Error correcting method and apparatus Patent
[NASA-CASE-XNP-02748] c08 N71-22749
Encoder/decoder system for a rapidly synchronizable binary code Patent

[NASA-CASE-NPO-10342]	c10 N71-33407	STREED, E. B.	Solar cell Patent	
STIGBERG, J. D.		[NASA-CASE-ARC-10050]		c03 N71-33409
Signal conditioner test set		STRINGHAM, R. S.	Vitra-violet process for producing flame	
[NASA-CASE-KSC-10750-1]	c35 N75-12270	resistant polyamides and products produced		
STINE, H. A.		thereby		
Electric arc apparatus Patent		[NASA-CASE-MSC-16074-1]		c27 N80-26446
[NASA-CASE-XAC-01677]	c09 N71-20816	STROM, T. B.	Spiral groove seal	
STIRN, R. J.		[NASA-CASE-XLB-10326-2]		c15 N72-29488
High voltage, high current Schottky barrier		Spiral groove seal		
solar cell		[NASA-CASE-XLB-10326-4]		c37 N74-15125
[NASA-CASE-NPO-13482-1]	c44 N78-13526	STRONG, I. J.	Stirring apparatus for plural test tubes Patent	
Schottky barrier cell and method of fabricating it		[NASA-CASE-XAC-06956]		c15 N71-21177
[NASA-CASE-NPO-13689-4]	c44 N81-26553	STRONG, J. P., III	Two-dimensional radiant energy array computers	
Schottky barrier solar cell		and computing devices		
[NASA-CASE-NPO-13689-2]	c44 N81-29525	[NASA-CASE-GSC-11839-1]		c60 N77-14751
STJOHN, R. H.		Analogue to digital converter for two-dimensional		
Walking boot assembly		radiant energy array computers		c60 N77-32731
[NASA-CASE-ARC-11101-1]	c54 N78-17675	[NASA-CASE-GSC-11839-3]		
STOCKARD, R. B.		Memory device for two-dimensional radiant energy		
Semiconductor p-n junction stress and strain		array computers		c60 N78-10709
sensor		[NASA-CASE-GSC-11839-2]		
[NASA-CASE-XLA-04980]	c09 N69-27422	STROUB, R. B.	Constant lift rotor for a heavier than air craft	
Method of making semiconductor p-n junction		[NASA-CASE-ARC-11045-1]		c05 N79-17847
stress and strain sensor		STROUBAL, G.	Thermal insulation protection means	
[NASA-CASE-XLA-04980-2]	c14 N72-28438	[NASA-CASE-MSC-12737-1]		c24 N79-25142
STOCKER, P. J.		STROUP, E. B.	Electrochemical coulometer and method of forming	
Laser extensometer		same Patent		
[NASA-CASE-NFS-19259-1]	c36 N78-14380	[NASA-CASE-XGS-05434]		c03 N71-20491
STOCKTON, R. J.		STROUL, G.	Solid state television camera system Patent	
Microwave switching power divider		[NASA-CASE-XMF-06092]		c07 N71-24612
[NASA-CASE-GSC-12420-1]	c33 N80-21670	STRUTHOFF, G. L.	Dual acting slit control mechanism	
STOKES, C. S.		[NASA-CASE-LAR-11370-1]		c35 N80-28686
Barium release system		STUART, J. L.	Automated fluid chemical analyzer Patent	
[NASA-CASE-LAR-10670-1]	c06 N73-30097	[NASA-CASE-XNP-09451]		c06 N71-26754
Rocket having barium release system to create		STUART, J. W.	Fire resistant coating composition Patent	
ion clouds in the upper atmosphere		[NASA-CASE-GSC-10072]		c18 N71-14014
[NASA-CASE-LAR-10670-2]	c15 N74-27360	Diffuse reflective coating		
STOKES, E. C.		[NASA-CASE-GSC-11214-1]		c06 N73-13128
Multispectral scanner optical system		STUCKEY, J. B.	Panelized high performance multilayer insulation	
[NASA-CASE-MSC-18255-1]	c74 N80-33210	Patent		
STOLLER, P. W.		[NASA-CASE-MPS-14023]		c33 N71-25351
Reversible motion drive system Patent		Cryogenic thermal insulation Patent		
[NASA-CASE-NPO-10173]	c15 N71-24696	[NASA-CASE-XMF-05046]		c33 N71-28892
STONE, F. A.		STUDENICK, D. E.	System for stabilizing torque between a balloon	
Synchronous servo loop control system Patent		and gondola		
[NASA-CASE-XNP-03744]	c10 N71-20448	[NASA-CASE-GSC-11077-1]		c02 N73-13008
STONE, L. P.		Fluid sampling device		
Articulated multiple couch assembly Patent		[NASA-CASE-GSC-12143-1]		c35 N77-32456
[NASA-CASE-MSC-11253]	c05 N71-12343	STUDER, P. A.	Electronic beam switching commutator Patent	
STONE, R. W., JR.		[NASA-CASE-XGS-01451]		c09 N71-10677
G conditioning suit Patent		Direct current motor with stationary armature		
[NASA-CASE-XLA-02898]	c05 N71-20268	and field Patent		
STONE, S. B.		[NASA-CASE-XGS-05290]		c09 N71-25999
Fluid sample collector Patent		Helical recorder arrangement for multiple		
[NASA-CASE-XMS-06767-1]	c14 N71-20435	channel recording on both sides of the tape		
STORY, A. W.		[NASA-CASE-GSC-10614-1]		c09 N72-11224
System for indicating direction of intruder		Electric motive machine including magnetic bearing		
aircraft		[NASA-CASE-XGS-07805]		c15 N72-33476
[NASA-CASE-ERC-10226-1]	c14 N73-16483	Magnetic bearing		
Display system		[NASA-CASE-GSC-11079-1]		c37 N75-18574
[NASA-CASE-ERC-10350]	c14 N73-20474	Magnetic bearing system		
STOTLER, C. L., JR.		[NASA-CASE-GSC-11978-1]		c37 N77-17464
Integrated gas turbine engine-nacelle		Three phase full wave dc motor decoder		
[NASA-CASE-LEW-12389-2]	c07 N78-18066	[NASA-CASE-GSC-11824-1]		c33 N77-26386
Integrated gas turbine engine-nacelle		Energy storage apparatus		
[NASA-CASE-LEW-12389-3]	c07 N79-14096	[NASA-CASE-GSC-12030-1]		c44 N78-24608
STRAIGHT, D. M.		A linear magnetic motor/generator		
Rocket motor system Patent		[NASA-CASE-GSC-12518-1]		c33 N80-19424
[NASA-CASE-XLB-00323]	c28 N70-38505	Non-contacting power transfer device		
Gas turbine exhaust nozzle		[NASA-CASE-GSC-12595-1]		c33 N81-12331
[NASA-CASE-LEW-11569-1]	c07 N74-15453	Linear magnetic bearing		
STRAND, L. D.		[NASA-CASE-GSC-12517-1]		c33 N81-22279
Solid propellant rocket motor		STUMP, C. W.	Apparatus for measuring an aircraft's speed and	
[NASA-CASE-NPO-11559]	c28 N73-24784			
Nitramine propellants				
[NASA-CASE-NPO-14103-1]	c28 N78-31255			
STRANGE, H. G.				
Position sensing device employing misaligned				
magnetic field generating and detecting				
apparatus Patent				
[NASA-CASE-XGS-07514]	c23 N71-16099			
Self-regulating proportionally controlled				
heating apparatus and technique				
[NASA-CASE-GSC-11752-1]	c77 N75-20140			
STRASS, H. K.				
Motion picture camera for optical pyrometry Patent				
[NASA-CASE-XLA-00062]	c14 N70-33254			
Light intensity modulator controller Patent				
[NASA-CASE-XMS-04300]	c09 N71-15479			

height
[NASA-CASE-LAR-12275-1] c35 N79-18296
Film advance indicator
[NASA-CASE-LAR-12474-1] c35 N80-31774
STUMP, R. C., JR.
Hydroxy terminated perfluoro ethers Patent
[NASA-CASE-NPO-10768] c06 N71-27254
Perfluoro polyether acyl fluorides
[NASA-CASE-NPO-10765] c06 N72-20121
Polyurethane resins from hydroxy terminated
perfluoro ethers
[NASA-CASE-NPO-10768-2] c06 N72-27144
Highly fluorinated polyurethanes
[NASA-CASE-NPO-10767-2] c06 N72-27151
Highly fluorinated polyurethanes
[NASA-CASE-NPO-10767-1] c06 N73-33076
STURGIS, A. C.
Multiparameter vision testing apparatus
[NASA-CASE-MSC-13601-2] c54 N75-27759
STURN, R. G.
Self-recording portable soil penetrometer
[NASA-CASE-MFS-20774] c14 N73-19420
STURMAN, J. C.
Pulsed differential comparator circuit Patent
[NASA-CASE-XLE-03804] c10 N71-19471
STYLES, C. H.
Spherical solid-propellant rocket motor Patent
[NASA-CASE-XLA-00105] c28 N70-33331
SUDEY, J.
Low speed phaselock speed control system
[NASA-CASE-GSC-11127-1] c09 N75-24758
SULLIVAN, D. B.
Electrical insulating layer process
[NASA-CASE-LEW-10489-1] c15 N72-25447
SULLIVAN, R. H.
Ablation article and method
[NASA-CASE-LAR-10439-1] c33 N73-27796
SULLIVAN, J. L.
Self-contained breathing apparatus
[NASA-CASE-MSC-14733-1] c54 N76-24900
SULLIVAN, T. E.
Waveguide mixer
[NASA-CASE-ERC-10179] c07 N72-20141
SUMIDA, J. T.
Miniature multichannel biotelemeter system
[NASA-CASE-NPO-13065-1] c52 N74-26625
SUMMERFIELD, D. G.
Wind tunnel model and method
[NASA-CASE-LAR-10812-1] c09 N74-17955
SUMMERS, R. H.
Geneva mechanism
[NASA-CASE-NPO-13281-1] c37 N75-13266
SUTLIFF, J. D.
Wing deployment method and apparatus Patent
[NASA-CASE-XMS-00907] c02 N70-41630
SWAIN, R. J.
Induction heating gun
[NASA-CASE-LAR-12540-1] c37 N80-11468
One step dual purpose joining technique
[NASA-CASE-LAR-12595-1] c37 N80-11469
SWAIN, R. L.
Spherical solid-propellant rocket motor Patent
[NASA-CASE-XLA-00105] c28 N70-33331
SWANN, R. T.
Sandwich panel construction Patent
[NASA-CASE-XLA-00349] c33 N70-37979
Dielectric molding apparatus Patent
[NASA-CASE-LAR-10121-1] c15 N71-26721
SWARTZ, P. F.
Micro-fluid exchange coupling apparatus
[NASA-CASE-ABC-11114-1] c51 N81-14605
SWEAT, J. C.
Emergency escape system Patent
[NASA-CASE-XKS-07814] c15 N71-27067
SWEET, G. E.
Compensating radiometer
[NASA-CASE-XLA-04556] c14 N69-27484
Spherical measurement device
[NASA-CASE-XLA-06683] c14 N72-28436
SWETTE, L. L.
Electrocatalyst for oxygen reduction
[NASA-CASE-BQN-10537-1] c06 N72-10138
SWINGLE, R. L.
Compact solar still Patent
[NASA-CASE-XMS-04533] c15 N71-23086
SWIRSKI, B. D.
Method of fabricating an object with a thin wall
having a precisely shaped slit
[NASA-CASE-LAR-10409-1] c31 N74-21659

SWORDS, B. B.
Adjustable force probe
[NASA-CASE-MFS-20760] c14 N72-33377
SYDNOR, R. L.
Ultra stable frequency distribution system
[NASA-CASE-NPO-13836-1] c32 N78-15323
SYVERTSON, C. A.
Flight craft Patent
[NASA-CASE-XAC-02058] c02 N71-16087
SZBNALESKI, B.
Computer circuit card puller
[NASA-CASE-FRC-11042-1] c37 N80-20589

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TADDEO, P. V.
Pulse generating circuit employing switch means
on ends of delay line for alternately charging
and discharging same Patent
[NASA-CASE-XNP-00745] c10 N71-28960
TALBOT, H. E.
Protection for energy conversion systems
[NASA-CASE-XGS-04808] c03 N69-25146
Inverter with means for base current shaping for
sweeping charge carriers from base region Patent
[NASA-CASE-XGS-06226] c10 N71-25950
TALLEY, D. H.
Response analyzers for sensors Patent
[NASA-CASE-MFS-11204] c14 N71-29134
TARPLEY, J. L.
Static coefficient test method and apparatus
[NASA-CASE-GSC-11893-1] c35 N76-31489
TASHBAH, P. W.
System for depositing thin films
[NASA-CASE-MFS-20775-1] c31 N75-12161
TAUB, W. H.
Radial module space station Patent
[NASA-CASE-XMS-01906] c31 N70-41373
Space vehicle system
[NASA-CASE-MSC-12561-1] c18 N76-17185
TAUSWORTHE, R. C.
Filter for third order phase locked loops
[NASA-CASE-NPO-11941-1] c10 N73-27171
Phase conjugation method and apparatus for an
active retrodirective antenna array
[NASA-CASE-NPO-13641-1] c32 N79-24210
TAYLOR, C. J.
High resolution developing of photosensitive
resists Patent
[NASA-CASE-XGS-04993] c14 N71-17574
TAYLOR, L. L.
Flexible composite membrane Patent
[NASA-CASE-XNP-08837] c18 N71-16210
TAYLOR, L. T.
Electrically conductive palladium containing
polyimide films
[NASA-CASE-LAR-12705-1] c33 N80-24549
TAYLOR, L. V.
Plural position switch status and operativeness
checker Patent
[NASA-CASE-XLA-08799] c10 N71-27272
TAYLOR, R. A.
Digital computing cardiometer
[NASA-CASE-MFS-20284-1] c52 N74-12778
TAYLOR, R. C.
Multi axes vibration fixtures
[NASA-CASE-MFS-20242] c14 N73-19421
TAYLOR, R. E.
Automatic acquisition system for phase-lock loop
[NASA-CASE-XGS-04994] c09 N69-21543
Polarization diversity monopulse tracking
receiver Patent
[NASA-CASE-IGS-03501] c09 N71-20864
Electromagnetic polarization systems and methods
Patent
[NASA-CASE-GSC-10021-1] c09 N71-24595
Method and automated apparatus for detecting
coliform organisms
[NASA-CASE-MSC-16777-1] c51 N80-27067
Navigation system and method
[NASA-CASE-GSC-12508-1] c04 N81-26085
TAYLOR, T. I.
Metabolic rate meter and method
[NASA-CASE-MSC-12239-1] c52 N79-21750
TCHEBREV, D. I.
Variable frequency nuclear magnetic resonance
spectrometer Patent
[NASA-CASE-XNP-09830] c14 N71-26266

TE POEL, H. E.
Television signal scan rate conversion system
Patent
[NASA-CASE-XMS-07168] c07 N71-11300

TEGHELLA, C. E.
Digital second-order phase-locked loop
[NASA-CASE-NPO-11905-1] c33 N74-12887

TEITELBAUM, S.
Frequency shift keyed demodulator Patent
[NASA-CASE-XGS-02889] c07 N71-11282

TELFER, T. A.
Method of determining bond quality of power
transistors attached to substrates
[NASA-CASE-MPS-21931-1] c37 N75-26372

TEMPLE, H. E.
Means for growing ribbon crystals without
subjecting the crystals to thermal
shock-induced strains
[NASA-CASE-NPO-14298-1] c76 N80-32244
Apparatus for use in the production of
ribbon-shaped crystals from a silicon melt
[NASA-CASE-NPO-14297-1] c33 N81-19389

TENER, W. H.
Cryogenic liquid sensor
[NASA-CASE-NPO-10619-1] c35 N77-21393

TENG, R. W.
Collapsible pistons
[NASA-CASE-MSC-13789-1] c11 N73-32152

TENOSO, H. J.
Water system virus detection
[NASA-CASE-MSC-16098-1] c51 N79-16693

TEPPER, E. H.
Regenerable device for scrubbing breathable air
of CO2 and moisture without special heat
exchanger equipment
[NASA-CASE-MSC-14771-1] c54 N77-32722

TERP, L. S.
Gas compression apparatus
[NASA-CASE-MSC-14557-1] c35 N78-10428

TERRAY, A.
Method of making an apertured casting
[NASA-CASE-LEW-11169-1] c37 N76-23570

TERSELC, E. A.
Split welding chamber Patent
[NASA-CASE-LEW-11531] c15 N71-14932

TESINSKY, J. S.
Flexible pile thermal barrier insulator
[NASA-CASE-MSC-19568-1] c34 N78-25350

TETSUKA, G. H.
Single or joint amplitude distribution analyzer
Patent
[NASA-CASE-XNP-01383] c09 N71-10659

THALER, S.
Voltage regulator Patent
[NASA-CASE-ERC-10113] c09 N71-27053
Current dependent filter inductance
[NASA-CASE-ERC-10139] c09 N72-17154

THALLER, L. H.
Combined electrolysis device and fuel cell and
method of operation Patent
[NASA-CASE-XLE-01645] c03 N71-20904
Electrically rechargeable REDOX flow
cell
[NASA-CASE-LEW-12220-1] c44 N77-14581
Electrochemical cell for rebalancing REDOX flow
system
[NASA-CASE-LEW-13150-1] c44 N79-26474

THATCHER, C. S.
Precision heat forming of tetrafluoroethylene
tubing
[NASA-CASE-MSC-18430-1] c31 N80-17292

THEAKSTON, H. A.
Floating nut retention system
[NASA-CASE-MSC-16938-1] c37 N80-23653

THIBODAUX, J. G., JR.
Spherical solid-propellant rocket motor Patent
[NASA-CASE-XLA-00105] c28 N70-33331
Bandrel for shaping solid propellant rocket fuel
into a motor casing Patent
[NASA-CASE-XLA-00304] c27 N70-34783
Method of making a solid propellant rocket motor
Patent
[NASA-CASE-XLA-04126] c28 N71-26779
Solid propellant rocket motor and method of
making same
[NASA-CASE-XLA-1349] c20 N77-17143

THIEL, A. H.
Aligning and positioning device Patent
[NASA-CASE-XMS-04178] c15 N71-22798

THIELE, C.
Space simulator Patent
[NASA-CASE-XNP-00459] c11 N70-38675

THIELE, C. L.
Thermal energy transformer
[NASA-CASE-NPO-14058-1] c44 N79-18443

THOLE, J. M.
Inflation system for balloon type satellites
Patent
[NASA-CASE-XGS-03351] c31 N71-16081

THOM, K.
Magnetically controlled plasma accelerator Patent
[NASA-CASE-XLA-00327] c25 N71-29184
Non-equilibrium radiation nuclear reactor
[NASA-CASE-HQN-10841-1] c73 N78-19920

THOMAS, D. F., JR.
Jet shoes
[NASA-CASE-XLA-08491] c05 N69-21380
One hand backpack harness
[NASA-CASE-LAR-10102-1] c05 N72-23085
Kinesthetic control simulator
[NASA-CASE-LAR-10276-1] c09 N75-15662
Fluid velocity measuring device
[NASA-CASE-LAR-11729-1] c34 N79-12359

THOMAS, H. W.
Electronic motor control system Patent
[NASA-CASE-XMP-01129] c09 N70-38712

THOMAS, H. E.
Optical communications system Patent
[NASA-CASE-XLA-01090] c07 N71-12389
Optical communications system Patent
[NASA-CASE-XLA-01090] c16 N71-28963

THOMAS, M. L.
Optical alignment device
[NASA-CASE-ARC-10932-1] c74 N76-22993

THOMAS, R. D.
Thermocouple tape
[NASA-CASE-LEW-11072-1] c14 N73-24472
Thermocouple tape
[NASA-CASE-LEW-11072-2] c35 N76-15434
Multi-cell battery protection system
[NASA-CASE-LEW-12039-1] c44 N78-14625

THOMAS, R. E.
Rapid, quantitative determination of bacteria in
water
[NASA-CASE-GSC-12158-1] c51 N78-22585
Method and apparatus for eliminating luminol
interference material
[NASA-CASE-MSC-16260-1] c51 N80-16714

THOMASON, H. E.
Trigonometric vehicle guidance assembly which
aligns the three perpendicular axes of two
three-axes systems Patent
[NASA-CASE-XMP-00684] c21 N71-21688
Azimuth laying system Patent
[NASA-CASE-XMP-01669] c21 N71-23289

THOMPSON, G. D., JR.
Cascaded complementary pair broadband transistor
amplifiers Patent
[NASA-CASE-NPO-10003] c10 N71-26415

THOMPSON, J. E., JR.
Inflatable transpiration cooled nozzle
[NASA-CASE-MPS-20619] c28 N72-11708

THOMPSON, E. B.
Length mode piezoelectric ultrasonic transducer
for inspection of solid objects
[NASA-CASE-MSC-19672-1] c38 N79-14398

THOMPSON, E. E.
On-film optical recording of camera lens settings
[NASA-CASE-MSC-12363-1] c14 N73-26431

THOMPSON, S. W.
Method of purifying metallurgical grade silicon
employing reduced pressure atmospheric control
[NASA-CASE-NPO-14474-1] c26 N80-14229

THOMPSON, W. W.
Inhibited solid propellant composition
containing beryllium hydride
[NASA-CASE-NPO-10866-1] c28 N79-14228

THOMSON, A. E.
Pulsed energy power system Patent
[NASA-CASE-MSC-13112] c03 N71-11057

THOMSON, J. A. L.
Wind measurement system
[NASA-CASE-MPS-23362-1] c47 N77-10753

THORNTON, G. E.
Hole cutter
[NASA-CASE-MPS-22649-1] c37 N75-25186

THORNTON, W. E.
Kinesimetric method and apparatus

[NASA-CASE-MSC-18929-1]	c54 N81-15699	[NASA-CASE-NPO-11091]	c18 N72-22567
THORNWALL, J. C.		TOMBRELLO, T. A.	
Regulated dc to dc converter		Method and means for helium/hydrogen ratio	
[NASA-CASE-XGS-03429]	c03 N69-21330	measurement by alpha scattering	
Pulse-type magnetic core memory element circuit		[NASA-CASE-NPO-14079-1]	c25 N80-20334
with blocking oscillator feedback Patent		TOMLINSON, H. M.	
[NASA-CASE-XGS-03303]	c08 N71-18595	Fuselage structure using advanced technology	
Stepping motor control circuit Patent		metal matrix fiber reinforced composites	
[NASA-CASE-GSC-10366-1]	c10 N71-18772	[NASA-CASE-LAR-11688-1]	c05 N78-18045
THORPE, R. S.		TOMLINSON, L. R.	
Reinforced structural plastics		Temperature sensitive flow regulator Patent	
[NASA-CASE-LEW-10199-1]	c27 N74-23125	[NASA-CASE-MFS-14259]	c15 N71-19213
THYS, P. C.		TONGIER, H., JR.	
Droplet monitoring probe		Absolute focus lock for microscopes	
[NASA-CASE-NPO-10985]	c14 N73-20478	[NASA-CASE-LAR-10184]	c14 N72-22445
TIBBITTS, W. C.		TOOLE, P. C.	
Apparatus and method for protecting a		High speed direct binary-to-binary coded decimal	
photographic device Patent		converter	
[NASA-CASE-NPO-10174]	c14 N71-18465	[NASA-CASE-KSC-10326]	c08 N72-21197
TICKNER, E. G.		High speed direct binary to binary coded decimal	
Liquid cooled brassiere and method of diagnosing		converter and scaler	
malignant tumors therewith		[NASA-CASE-KSC-10595]	c08 N73-12176
[NASA-CASE-ABC-11007-1]	c52 N77-14736	Compact-bi-phase pulse coded modulation decoder	
TIERBERMAN, H. W.		[NASA-CASE-KSC-10834-1]	c33 N76-14371
Optical torque meter Patent		Telephone multiline signaling using common	
[NASA-CASE-XLE-00503]	c14 N70-34818	signal pair	
TILLER, M. G.		[NASA-CASE-KSC-11023-1]	c32 N79-23310
Device for measuring bearing preload		Automatic level control circuit	
[NASA-CASE-MFS-20434]	c11 N72-25288	[NASA-CASE-KSC-11170-1]	c33 N81-29347
TIMM, J. D.		TOOTS, J.	
Counter Patent		Microwave integrated circuit for Josephson	
[NASA-CASE-XNP-06234]	c10 N71-27137	voltage standards	
TIMOR, U.		[NASA-CASE-MFS-23845-1]	c33 N81-17348
Multichannel telemetry system		TOPITS, A., JR.	
[NASA-CASE-NPO-11572]	c07 N73-16121	High impact pressure regulator Patent	
Receiver with an improved phase lock loop in a		[NASA-CASE-NPO-10175]	c14 N71-18625
multichannel telemetry system with suppressed		Apparatus for forming drive belts	
carrier		[NASA-CASE-NPO-13205-1]	c31 N74-32917
[NASA-CASE-NPO-11593-1]	c07 N73-28012	TORBETT, M. A.	
TINLING, B. E.		Liquid-immersible electrostatic ultrasonic	
Stabilization of gravity oriented satellites		transducer	
Patent		[NASA-CASE-LAR-12465-1]	c35 N80-18363
[NASA-CASE-XAC-01591]	c31 N71-17729	TORNEY, F. L., JR.	
TISCHLER, R. F.		Ultrahigh vacuum gauge having two collector	
Probes having ring and primary sensor at same		electrodes	
potential to prevent collection of stray wall		[NASA-CASE-LAR-02743]	c14 N73-32324
currents in ionized gases		TOTH, L. R.	
[NASA-CASE-XLE-00690]	c25 N69-35884	Belleville spring assembly with elastic guides	
TISDALE, B. P., SR.		[NASA-CASE-XNP-09452]	c15 N69-27504
Velocity vector control system augmented with		TOWNES, C. H.	
direct lift control		Optical frequency waveguide Patent	
[NASA-CASE-LAR-12268-1]	c08 N81-24106	[NASA-CASE-HQN-10541-1]	c07 N71-26291
TITLE, A. H.		Laser machining apparatus Patent	
Partial polarizer filter		[NASA-CASE-HQN-10541-2]	c15 N71-27135
[NASA-CASE-GSC-12225-1]	c74 N79-14891	Optical frequency waveguide and transmission	
TITUS, L. E.		system Patent	
Wide power range microwave feedback controller		[NASA-CASE-HQN-10541-4]	c16 N71-27183
[NASA-CASE-GSC-12146-1]	c33 N78-32340	Optical frequency waveguide and transmission	
TOBIAS, R. A.		system	
Thermostatic actuator		[NASA-CASE-HQN-10541-3]	c23 N72-23695
[NASA-CASE-NPO-10637]	c15 N72-12409	TOWNSEND, H. E.	
Thermal motor		Digital telemetry system Patent	
[NASA-CASE-NPO-11283]	c09 N72-25260	[NASA-CASE-XGS-01812]	c07 N71-23001
TOCK, R. E.		TOY, M. S.	
Mixture separation cell Patent		New polymers of perfluorobutadiene and method of	
[NASA-CASE-XMS-02952]	c18 N71-20742	manufacture Patent application	
TODD, H. H.		[NASA-CASE-NPO-10863]	c06 N70-11251
Method of producing refractory bodies having		Method of polymerizing perfluorobutadiene Patent	
controlled porosity Patent		application	
[NASA-CASE-LEW-10393-1]	c17 N71-15468	[NASA-CASE-NPO-10447]	c06 N70-11252
Shock tube powder dispersing apparatus Patent		Reaction of fluorine with polyperfluoropolyenes	
[NASA-CASE-XLE-04946]	c17 N71-24911	[NASA-CASE-NPO-10862]	c06 N72-22107
TOFT, A. E.		Polymers of perfluorobutadiene and method of	
Star tracking reticles and process for the		manufacture	
production thereof		[NASA-CASE-NPO-10863-2]	c06 N72-25152
[NASA-CASE-GSC-11188-2]	c21 N73-19630	Utilization of oxygen difluoride for syntheses	
Star tracking reticles		of fluoropolymers	
[NASA-CASE-GSC-11188-1]	c14 N73-32320	[NASA-CASE-NPO-12061-1]	c27 N76-16228
Formation of star tracking reticles		Vitra-violet process for producing flame	
[NASA-CASE-GSC-11188-3]	c74 N74-20008	resistant polyamides and products produced	
TOLL, T. A.		thereby	
Variable sweep wing aircraft Patent		[NASA-CASE-MSC-16074-1]	c27 N80-26446
[NASA-CASE-XLA-00221]	c02 N70-33266	TRADEP, A. G.	
TOLSON, B. A.		Subgravity simulator Patent	
Cable stabilizer for open shaft cable operated		[NASA-CASE-XMS-04798]	c11 N71-21474
elevators		Pneumatic amplifier Patent	
[NASA-CASE-KSC-10513]	c15 N72-25453	[NASA-CASE-MSC-12121-1]	c15 N71-27147
TOM, H. Y.		TRAVIS, B. W.	
Ionene membrane separator		Satellite appendage tie down cord Patent	

[NASA-CASE-XGS-02554] c31 N71-21064
TRELBASE, R. B.
 Hydraulic casting of liquid polymers Patent
 [NASA-CASE-XNP-07659] c06 N71-22975
TRENT, R. C.
 Method of manufacturing semiconductor devices
 using refractory dielectrics
 [NASA-CASE-XER-08476-1] c26 N72-17820
TRENT, R. L.
 Location identification system
 [NASA-CASE-ERC-10324] c07 N72-25173
TRIMBLE, D. W.
 Combinational logic for generating gate drive
 signals for phase control rectifiers
 [NASA-CASE-MFS-25208-1] c33 N81-27402
TRIMPI, E. L.
 Combustion detector
 [NASA-CASE-LAB-10739-1] c14 N73-16484
TRINH, E.
 System for monitoring physical characteristics
 of fluids
 [NASA-CASE-NPO-15400-1] c34 N81-24384
TRIOLO, J. J.
 Apparatus for controlling the temperature of
 balloon-borne equipment
 [NASA-CASE-GSC-11620-1] c34 N74-23039
TRIPP, C. M.
 Booster tank system Patent
 [NASA-CASE-MSC-12390] c27 N71-29155
TRISCHLER, F. D.
 Polyurethanes of fluorine containing
 polycarbonates
 [NASA-CASE-MFS-10512] c06 N73-30099
 Polyurethanes from fluoralkyl propyleneglycol
 polyethers
 [NASA-CASE-MFS-10506] c06 N73-30100
 Fluorohydroxy ethers
 [NASA-CASE-MFS-10507] c06 N73-30101
 Highly fluorinated polymers
 [NASA-CASE-MFS-11492] c06 N73-30102
 Fluorine containing polyurethane
 [NASA-CASE-MFS-10509] c06 N73-30103
 Fluorine-containing polyformals
 [NASA-CASE-XMF-06900-1] c27 N79-21191
TROST, R. F.
 Data compression system with a minimum time
 delay unit Patent
 [NASA-CASE-XNP-08832] c08 N71-12506
TROUT, O. F., JR.
 Heat protection apparatus Patent
 [NASA-CASE-XLA-00892] c33 N71-17897
TROWBRIDGE, D. L.
 Independent gain and bandwidth control of a
 traveling wave maser
 [NASA-CASE-NPO-13801-1] c36 N78-18410
 Swept group delay measurement
 [NASA-CASE-NPO-13909-1] c33 N78-25319
 Maser amplifier slow wave structure
 [NASA-CASE-NPO-15211-1] c36 N81-24425
TRUBERT, M. R.
 Collapsible structure for an antenna reflector
 [NASA-CASE-NPO-11751] c07 N73-24176
TRUSCH, B. B.
 Condensate removal device for heat exchanger
 [NASA-CASE-MSC-14143-1] c77 N75-20139
TRUSSER, D. B.
 High intensity heat and light unit Patent
 [NASA-CASE-XLA-00141] c09 N70-33312
TSCHIRCH, R. P.
 Heat sealable, flame and abrasion resistant
 coated fabric
 [NASA-CASE-MSC-18382-1] c27 N80-24440
TSCHUNKO, R. F. A.
 Optical mirror apparatus Patent
 [NASA-CASE-ERC-10001] c23 N71-24868
 Electromechanical control actuator system Patent
 [NASA-CASE-ERC-10022] c15 N71-26635
 Optical system support apparatus
 [NASA-CASE-XER-07896-2] c23 N72-22673
TSUDA, G. I.
 High efficiency multifrequency feed
 [NASA-CASE-GSC-11909] c32 N74-20863
TSUO, Y. H.
 Photocapacitive image converter
 [NASA-CASE-LAB-12513-1] c33 N80-28635
TSUTSUMI, K.
 Hydraulic drive mechanism Patent
 [NASA-CASE-XMS-03252] c15 N71-10658

TUBBS, H. E.
 Continuous detonation reaction engine Patent
 [NASA-CASE-XMF-06926] c28 N71-22983
TUCKER, C. E., JR.
 Mobile sampler for use in acquiring samples of
 terrestrial atmospheric gasses
 [NASA-CASE-NPO-15220-1] c35 N81-24414
TUCKER, E. M.
 Coupling device
 [NASA-CASE-XMS-07846-1] c09 N69-21927
 Space suit heat exchanger Patent
 [NASA-CASE-XMS-09571] c05 N71-19439
 Extravehicular tunnel suit system Patent
 [NASA-CASE-MSC-12243-1] c05 N71-24728
TUGGLE, R. H., JR.
 Apparatus for assembling space structure
 [NASA-CASE-MFS-23579-1] c18 N79-11108
TUMULTY, W. T., JR.
 Minimech self-deploying boom mechanism
 [NASA-CASE-GSC-10566-1] c15 N72-18477
TUNG, Y.
 Liquid waste feed system
 [NASA-CASE-LAB-10365-1] c05 N72-27102
TURK, R. B.
 Fabrication of controlled-porosity metals Patent
 [NASA-CASE-XNP-04339] c17 N71-29137
TURLEY, A. P.
 Time delay and integration detectors using
 charge transfer devices
 [NASA-CASE-GSC-12324-1] c33 N81-33403
TURNAGE, J. E.
 Flame detector operable in presence of proton
 radiation
 [NASA-CASE-MFS-21577-1] c19 N74-29410
TURNER, G. B.
 Driver for solar cell I-V characteristic plots
 [NASA-CASE-NPO-14096-1] c44 N80-18551
TURNER, J. W.
 Measurement system
 [NASA-CASE-MFS-20658-1] c14 N73-30386
TURNER, R. C.
 Thermocouple assembly Patent
 [NASA-CASE-XNP-01659] c14 N71-23039
TURNER, R. E.
 Anemometer with braking mechanism Patent
 [NASA-CASE-XMF-05224] c14 N71-23726
 Maxometers (peak wind speed anemometers)
 [NASA-CASE-MFS-20916] c14 N73-25460
TURNER, T. B.
 Double hinged flap Patent
 [NASA-CASE-XLA-01290] c02 N70-42016
TUTTLE, S. A.
 Application of luciferase assay for ATP to
 antimicrobial drug susceptibility
 [NASA-CASE-GSC-12039-1] c51 N77-22794
TVETIAN, W.
 Data compression system
 [NASA-CASE-XNP-09785] c08 N69-21928
TWARD, E.
 A cycling Joule Thomson refrigerator
 [NASA-CASE-NPO-15251-1] c31 N81-19344
TYAGI, B. C.
 High field CdS detector for infrared radiation
 [NASA-CASE-LAB-11027-1] c35 N74-18088
 Vapor phase growth of groups 3-5 compounds by
 hydrogen chloride transport of the elements
 [NASA-CASE-LAB-11144-1] c25 N75-26043
TYCE, M.
 Apparatus for simulating optical transmission
 links
 [NASA-CASE-GSC-11877-1] c74 N76-18913
TYLER, A. L.
 Helical recorder arrangement for multiple
 channel recording on both sides of the tape
 [NASA-CASE-GSC-10614-1] c09 N72-11224
 System for stabilizing torque between a balloon
 and gondola
 [NASA-CASE-GSC-11077-1] c02 N73-13008

U

UBBE, P. W.
 Tape recorder Patent
 [NASA-CASE-XGS-08259] c14 N71-23698
ULRICH, B. B.
 Aircraft-mounted crash-activated transmitter
 device
 [NASA-CASE-MFS-16609-3] c03 N76-32140

ULRICH, D. R.
Screened circuit capacitors
[NASA-CASE-LAR-10294-1] c26 N72-28762

ULRICH, G. R.
Latching device
[NASA-CASE-MFS-21606-1] c37 N75-19685

UNDERWOOD, J. H.
Collimator of multiple plates with axially
aligned identical random arrays of apertures
[NASA-CASE-MFS-20546-2] c14 N73-30389

Multiplate focusing collimator
[NASA-CASE-MFS-20932-1] c35 N75-19616

UPDIKE, O. L.
Apparatus for measuring a sorbate dispersed in a
fluid stream
[NASA-CASE-ARC-10896-1] c35 N78-19465

UPTON, D. T.
Camera arrangement
[NASA-CASE-GSC-12032-2] c35 N76-19408

URBAN, E. W.
Direct current transformer
[NASA-CASE-MFS-23659-1] c33 N79-17133

URSEY, B. C.
Collapsible nozzle extension for rocket engines
Patent
[NASA-CASE-MFS-11497] c28 N71-16224

V

VALENTIJN, N. P.
Roll-up solar array Patent
[NASA-CASE-NPO-10188] c03 N71-20273

Deployable solar cell array
[NASA-CASE-NPO-10883] c31 N72-22874

VALINSKY, J. P.
Device for monitoring a change in mass in
varying gravimetric environments
[NASA-CASE-MFS-21556-1] c35 N74-26945

VALLOTTON, W. C.
Anthropomorphic master/slave manipulator system
[NASA-CASE-ARC-10756-1] c54 N77-32721

Mechanical energy storage device for hip
disarticulation
[NASA-CASE-ARC-10916-1] c52 N78-10686

VANALSTYNE, E. R.
Spacecraft Patent
[NASA-CASE-MSC-13047-1] c31 N71-25434

VANARNAN, D. E.
Pneumatic system for controlling and actuating
pneumatic cyclic devices
[NASA-CASE-XMS-04843] c03 N69-21469

VANATTA, L. C.
Circularly polarized antenna
[NASA-CASE-ERC-10214] c09 N72-31235

VANAUKEN, R.
Reinforced polyquinoxaline gasket and method of
preparing the same
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VANDERHOFF, J. W.
Process for preparation of large-particle-size
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VANDERLIET, E. K.
Magnetic power switch Patent
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VANGO, S. P.
Liquid junction and method of fabricating the
same Patent Application
[NASA-CASE-NPO-10682] c15 N70-34699

Flexible composite membrane Patent
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VANNUCCI, R. D.
Curing agent for polyepoxides and epoxy resins
and composites cured therewith
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VANO, A. E.
Quick attach mechanism Patent
[NASA-CASE-XFR-05421] c15 N71-22994

VANORNUM, D. G.
Electric arc light source having undercut
recessed anode
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VANSCHOIACK, R. H. E.
High impedance measuring apparatus Patent
[NASA-CASE-XMS-08589-1] c09 N71-20569

VANTUYLBRUSCH, W.
Millimeter wave radiometer for radio astronomy
Patent
[NASA-CASE-XNP-09832] c30 N71-23723

VARGO, D. J.
Ophthalmic method and apparatus
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VARNA, I. E.
Phosphorus-containing bisimide resins
[NASA-CASE-ARC-11321-1] c27 N81-27272

Phosphorus-containing imide resins
[NASA-CASE-ARC-11368-1] c27 N81-31364

VARSI, G.
Seismic vibration source
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VARY, A.
Triode thermionic energy converter
[NASA-CASE-XLE-01015] c03 N69-39898

High temperature heat source Patent
[NASA-CASE-XLE-00490] c33 N70-34545

Radiant heater having formed filaments Patent
[NASA-CASE-XLE-00387] c33 N70-34812

Inductive liquid level detection system Patent
[NASA-CASE-XLE-01609] c14 N71-10500

Capillary radiator Patent
[NASA-CASE-XLE-03307] c33 N71-14035

Thermionic converter with current augmented by
self induced magnetic field Patent
[NASA-CASE-XLE-01903] c22 N71-23599

Cyclic switch Patent
[NASA-CASE-LEW-10155-1] c09 N71-29035

VAUGHAN, G. R.
Phase locked phase modulator including a voltage
controlled oscillator Patent
[NASA-CASE-XNP-05382] c10 N71-23544

VAUGHAN, O. H.
Emergency lunar communications system
[NASA-CASE-MFS-21042] c07 N72-25171

VAUGHAN, R. L.
Electrolytic cell structure
[NASA-CASE-LAR-11042-1] c33 N75-27252

VAUGHAN, R. W.
Capillary flow weld-bonding
[NASA-CASE-LAR-11726-1] c37 N76-27568

Weld-bonded titanium structures
[NASA-CASE-LAR-11549-1] c37 N77-11397

VAUSE, R.
Acoustically swept rotor
[NASA-CASE-ARC-11106-1] c05 N80-14107

VEBRENCAMP, J. E.
Electromagnetic radiation energy arrangement
[NASA-CASE-WOO-00428-1] c32 N79-19186

VEIKINS, O.
Apparatus for establishing flow of a fluid mass
having a known velocity
[NASA-CASE-MFS-21424-1] c34 N74-27730

VEILLETTE, L. J.
Angular position and velocity sensing apparatus
Patent
[NASA-CASE-XGS-05680] c14 N71-17585

Bidirectional step torque filter with zero
backlash characteristic Patent
[NASA-CASE-XGS-04227] c15 N71-21744

Control apparatus for applying pulses of
selectively predetermined duration to a
sequence of loads Patent
[NASA-CASE-XGS-04224] c10 N71-26418

Synchronous dc direct drive system Patent
[NASA-CASE-GSC-10065-1] c10 N71-27136

Axially and radially controllable magnetic bearing
[NASA-CASE-GSC-11551-1] c37 N76-18459

VELLEND, H.
Application of luciferase assay for ATP to
antimicrobial drug susceptibility
[NASA-CASE-GSC-12039-1] c51 N77-22794

Determination of antimicrobial susceptibilities
on infected urines without isolation
[NASA-CASE-GSC-12046-1] c52 N79-14750

VERMILION, C. R.
Facsimile video remodulation network
[NASA-CASE-GSC-10185-1] c07 N72-12081

VERMILION, C. R.
Resistance soldering apparatus
[NASA-CASE-GSC-10913] c15 N72-22491

VERNIKOS, J.
Indomethacin-antihistamine combination for
gastric ulceration control
[NASA-CASE-ARC-11118-2] c52 N81-14613

VESSOT, R. P. C.
Atomic hydrogen maser with bulb temperature
control to remove wall shift in maser output
frequency
[NASA-CASE-HQN-10654-1] c16 N73-13489

Tunable cavity resonator with ramp shaped supports
[NASA-CASE-HQN-16790-1] c36 N74-11313

VICK, A. B.
Method of obtaining permanent record of surface
flow phenomena Patent
[NASA-CASE-XLA-01353] c14 N70-41366

VICK, H. A.
Blood pressure measuring system for separating
and separately recording dc signal and an ac
signal Patent
[NASA-CASE-XMS-06061] c05 N71-23317

VICKERS, J. H.
Portable electrophoresis apparatus using minimum
electrolyte
[NASA-CASE-NPO-13274-1] c25 N79-10163

VICKERS, J. H. P.
Intermittent type silica gel adsorption
refrigerator Patent
[NASA-CASE-XNP-00920] c15 N71-15906

VIEHMANN, W.
Fluorescent radiation converter
[NASA-CASE-GSC-12528-1] c74 N81-24900

VIIKINSALO, S. J.
Helmet latching and attaching ring
[NASA-CASE-XMS-04670] c54 N78-17678

VILLABREAL, S.
Receiving and tracking phase modulated signals
[NASA-CASE-MSC-16170-2] c32 N81-16338

VINAL, A. W.
Redundant memory organization Patent
[NASA-CASE-GSC-10564] c10 N71-25135

VINCENT, J. S.
Method of forming thin window drifted silicon
charged particle detector Patent
[NASA-CASE-XLE-00808] c24 N71-10560

VINE, J.
Magnifying image intensifier
[NASA-CASE-GSC-12010-1] c74 N78-18905

VIVIAN, H. C.
Photosensitive device to detect bearing
deviation Patent
[NASA-CASE-XNP-00438] c21 N70-35089
Space vehicle attitude control Patent
[NASA-CASE-XNP-00465] c21 N70-35395
Remodulator filter Patent
[NASA-CASE-NPO-10198] c09 N71-24806

VODICKA, V. W.
Magnetic recording head and method of making
same Patent
[NASA-CASE-GSC-10097-1] c08 N71-27210

VOGELBY, A. W.
Cable arrangement for rigid tethering Patent
[NASA-CASE-XLA-02332] c32 N71-17609
Combined optical attitude and altitude
indicating instrument Patent
[NASA-CASE-XLA-01907] c14 N71-23268

VOLK, G. G.
Portable device for use in starting
air-start-units for aircraft and having cable
lead testing capability
[NASA-CASE-FRC-10113-1] c33 N80-26599

VOLKOFF, J. J.
Electro-optical scanning apparatus Patent;
Application
[NASA-CASE-NPO-11106] c14 N70-34697

VOLPE, P. A.
Sun tracker with rotatable plane-parallel plate
and two photocells Patent
[NASA-CASE-XGS-01159] c21 N71-10678
Attitude control system Patent
[NASA-CASE-XGS-04393] c21 N71-14159
Star scanner
[NASA-CASE-GSC-11569-1] c89 N74-30886

VONFRAGENAU, G. L.
Support apparatus for dynamic testing Patent
[NASA-CASE-XNP-01772] c11 N70-41677
Hydraulic support for dynamic testing Patent
[NASA-CASE-XNP-03248] c11 N71-10604
Space vehicle
[NASA-CASE-MPS-22734-1] c18 N75-19329
Translatory shock absorber for attitude sensors
[NASA-CASE-MPS-22905-1] c19 N76-22284
Attitude control system
[NASA-CASE-MPS-22787-1] c15 N77-10113

VONROOS, O. H.
Method and apparatus for measuring minority
carrier lifetimes and bulk diffusion length in
P-N junction solar cells
[NASA-CASE-NPO-14100-1] c44 N79-12541

VONTIENENHAUSEN, G.
Beam connector apparatus and assembly
[NASA-CASE-MPS-25134-1] c31 N81-12283

VONTIENENHAUSEN, G. F.
Energy absorbing device Patent
[NASA-CASE-XMP-10040] c15 N71-22877

VORHABEN, K. H.
System for producing chroma signals
[NASA-CASE-MSC-14683-1] c74 N77-18893

VORKINK, H. G.
Variable frequency nuclear magnetic resonance
spectrometer Patent
[NASA-CASE-XNP-09830] c14 N71-26266

VORREITER, J. H.
Cryogenic container compound suspension strap
[NASA-CASE-ARC-11157-1] c37 N80-18393

VRANAS, T.
Impact energy absorber Patent
[NASA-CASE-XLA-01530] c14 N71-23092
High temperature strain gage calibration fixture
[NASA-CASE-LAR-11500-1] c35 N76-24523
Hot foil transducer skin friction sensor
[NASA-CASE-LAR-12321-1] c35 N81-12390

VUKELICH, H. K.
Method and device for detecting voids in low
density material Patent
[NASA-CASE-MPS-20044] c14 N71-28993

VYUKAL, H. C.
Universal pilot restraint suit and body support
therefor Patent
[NASA-CASE-XAC-00405] c05 N70-41819
Hard space suit Patent
[NASA-CASE-XAC-07043] c05 N71-23161
Locomotion and restraint aid Patent
[NASA-CASE-ARC-10153] c05 N71-28619
Space suit having improved waist and torso
movement
[NASA-CASE-ARC-10275-1] c05 N72-22092
Anthropomorphic master/slave manipulator system
[NASA-CASE-ARC-10756-1] c54 N77-32721
Walking boot assembly
[NASA-CASE-ARC-11101-1] c54 N78-17675
Spacesuit mobility joints
[NASA-CASE-ARC-11058-1] c54 N78-31735
Spacesuit torso closure
[NASA-CASE-ARC-11100-1] c54 N78-31736
Cooling system for removing metabolic heat from
an hermetically sealed spacesuit
[NASA-CASE-ARC-11059-1] c54 N78-32721
Spacesuit mobility knee joints
[NASA-CASE-ARC-11058-2] c54 N79-24651
Pressure suit joint analyzer
[NASA-CASE-ARC-11314-1] c54 N80-30043
Spine immobilization apparatus
[NASA-CASE-ARC-11167-1] c52 N81-25662

W

WADE, O. W.
Method and apparatus for tensile testing of
metal foil
[NASA-CASE-LAR-10208-1] c35 N76-18400

WAGES, C. G.
Ultrasonic scanning system for in-place
inspection of brazed tube joints
[NASA-CASE-MPS-20767-1] c38 N74-15130

WAGNER, A. P.
Inverter ratio failure detector
[NASA-CASE-NPO-13160-1] c35 N74-18090

WAGNER, C. A.
Rotating raster generator
[NASA-CASE-FRC-10071-1] c32 N74-20813
Smoothing filter for digital to analog conversion
[NASA-CASE-FRC-11025-1] c60 N80-17723

WAGNER, H. B.
Collapsible loop antenna for space vehicle Patent
[NASA-CASE-XNP-00437] c07 N70-40202

WAKELYN, H. T.
Production of high purity silicon carbide Patent
[NASA-CASE-XLA-00158] c26 N70-36805
Apparatus for producing high purity silicon
carbide crystals Patent
[NASA-CASE-XLA-02057] c26 N70-40015
Method of coating carbonaceous base to prevent
oxidation destruction and coated base Patent
[NASA-CASE-XLA-00284] c15 N71-16075
Method of coating carbonaceous base to prevent
oxidation destruction and coated base Patent
[NASA-CASE-XLA-00302] c15 N71-16077

Thermal control coating Patent [NASA-CASE-XLA-01995]	c18 N71-23047	[NASA-CASE-ARC-10278-1]	c14 N73-25463
WALD, D. Differential temperature transducer Patent [NASA-CASE-XAC-06812]	c14 N71-15598	WALTER, H. U. Method of crystallization [NASA-CASE-MFS-23001-1]	c76 N77-32919
WALKER, D. J. Flame detector operable in presence of proton radiation [NASA-CASE-MFS-21577-1]	c19 N74-29410	WALTERS, R. B. Telespectrograph Patent [NASA-CASE-XLA-03273]	c14 N71-18699
WALKER, H. J. An annular wing [NASA-CASE-PBC-11007-2]	c02 N79-24959	WALTON, T. S. Electronic checkout system for space vehicles Patent [NASA-CASE-XKS-08012-2]	c31 N71-15566
WALKER, H. M. Space environmental work simulator Patent [NASA-CASE-XMF-07488]	c11 N71-18773	WANG, D. S. Installing fiber insulation [NASA-CASE-MSC-16973-1]	c37 N81-14317
Cork-resin ablative insulation for complex surfaces and method for applying the same [NASA-CASE-MFS-23626-1]	c24 N80-26388	WANG, G. Y. A synchronous binary array divider [NASA-CASE-ERC-10180-1]	c60 N74-20836
WALKER, M. L. Lightweight reflector assembly [NASA-CASE-NPO-13707-1]	c74 N77-28933	WANG, T. G. Material suspension within an acoustically excited resonant chamber [NASA-CASE-NPO-13263-1]	c12 N75-24774
WALL, R. J. Automated clinical system for chromosome analysis [NASA-CASE-NPO-13913-1]	c52 N79-12694	Heat operated cryogenic electrical generator [NASA-CASE-NPO-13303-1]	c20 N75-24837
WALL, W. A., JR. Apparatus for welding torch angle and seam tracking control Patent [NASA-CASE-XMF-03287]	c15 N71-15607	Acoustic energy shaping [NASA-CASE-NPO-13802-1]	c71 N78-10837
Automatic closed circuit television arc guidance control Patent [NASA-CASE-MFS-13046]	c07 N71-19433	Acoustic driving of rotor [NASA-CASE-NPO-14005-1]	c71 N79-20827
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Internal flare angle gauge Patent [NASA-CASE-XMF-04415]	c14 N71-24693	WANGER, R. P. Apparatus for sensor failure detection and correction in a gas turbine engine control system [NASA-CASE-LEW-12907-2]	c07 N81-19115
Computerized system for translating a torch head [NASA-CASE-MFS-23620-1]	c37 N79-10421	WARD, D. R. Automatically deploying nozzle exit cone extension Patent [NASA-CASE-XLE-01640]	c31 N71-15637
WALLACE, C. J. Membrane consisting of polyquaternary amine ion exchange polymer network interpenetrating the chains of thermoplastic matrix polymer [NASA-CASE-NPO-14001-1]	c27 N81-14076	WARD, J. P. Variable geometry rotor system [NASA-CASE-LAR-10557]	c02 N72-11018
WALLACE, E. D. Apparatus for tensile testing Patent [NASA-CASE-XKS-06250]	c14 N71-15600	WARD, J. O. Digital automatic gain amplifier [NASA-CASE-KSC-11008-1]	c33 N79-22373
Valve seat with resilient support member Patent [NASA-CASE-XKS-02582]	c15 N71-21234	WARD, W. D. Vapor liquid separator Patent [NASA-CASE-XMF-04042]	c15 N71-23023
Weld preparation machine Patent [NASA-CASE-XKS-07953]	c15 N71-26134	WARKENTINE, D. E. Automatic battery charger Patent [NASA-CASE-XNP-04758]	c03 N71-24605
WALLACE, G. R. Pseudo-noise test set for communication system evaluation [NASA-CASE-MFS-22671-1]	c35 N75-21582	WARNECK, P. Analytical photoionization mass spectrometer with an argon gas filter between the light source and monochromator Patent [NASA-CASE-LAR-10180-1]	c06 N71-13461
Method of and means for testing a tape record/playback system [NASA-CASE-MFS-22671-2]	c35 N77-17426	WARREN, A. D. Installing fiber insulation [NASA-CASE-MSC-16973-1]	c37 N81-14317
WALLINGFORD, W. M. Differential phase shift keyed communication system [NASA-CASE-MSC-14065-1]	c32 N74-26654	WARREN, A. P. Assembly for recovering a capsule Patent [NASA-CASE-XMF-00641]	c31 N70-36410
Differential phase shift keyed signal resolver [NASA-CASE-MSC-14066-1]	c33 N74-27705	Space capsule ejection assembly Patent [NASA-CASE-XMF-03169]	c31 N71-15675
WALLIO, M. A. Electric-arc heater Patent [NASA-CASE-XLA-00330]	c33 N70-34540	Method and apparatus for securing to a spacecraft Patent [NASA-CASE-MFS-11133]	c31 N71-16222
WALLIS, D. E. Low-frequency radio navigation system [NASA-CASE-NPO-15264-1]	c04 N81-22036	WATERS, W. J. Nickel-base alloy Patent [NASA-CASE-XLE-00283]	c17 N70-36616
WALLSON, B. E. Mechanical end joint system for structural column elements [NASA-CASE-LAR-12482-1]	c37 N80-22704	Nickel-base alloy containing Mo-W-Al-Cr-Ta-Zr-C-Nb-B Patent [NASA-CASE-XLE-02082]	c17 N71-16026
WALSH, J. M. Specific wavelength colorimeter [NASA-CASE-MSC-14081-1]	c35 N74-27860	Nickel base alloy [NASA-CASE-LEW-10874-1]	c17 N72-22535
WALSH, J. V. Pressure letdown method and device for coal conversion systems [NASA-CASE-NPO-15100-1]	c28 N81-33306	Method of forming superalloys [NASA-CASE-LEW-10805-1]	c15 N73-13465
WALSH, T. C. Vibration damping system Patent [NASA-CASE-XMS-01620]	c23 N71-15673	Method of heat treating a formed powder product material [NASA-CASE-LEW-10805-3]	c26 N74-10521
WALSH, T. J. Apparatus for making a metal slurry product Patent [NASA-CASE-XLE-00010]	c15 N70-33382	Method of forming articles of manufacture from superalloy powders [NASA-CASE-LEW-10805-2]	c37 N74-13179
WALSH, T. M. Interferometric rotation sensor		Nickel base alloy [NASA-CASE-LEW-12270-1]	c26 N77-32280

WATSON, J. D.
 Tumbler system to provide random motion
 [NASA-CASE-XGS-02437] c15 N69-21472
WATSON, J. E.
 High temperature spark plug Patent
 [NASA-CASE-XLB-00660] c28 N70-39925
WATSON, B. D.
 Payload/burned-out motor case separation system
 Patent
 [NASA-CASE-XLA-05369] c31 N71-15687
WATSON, V. E.
 Electric arc apparatus Patent
 [NASA-CASE-IAC-01677] c09 N71-20816
WAYLAND, H. J.
 Servo-controlled intravital microscope system
 [NASA-CASE-NPO-13214-1] c35 N75-25123
WEAR, J. D.
 Rocket engine Patent
 [NASA-CASE-XLB-00342] c28 N70-37980
WEATHERS, G. D.
 Pseudo-noise test set for communication system
 evaluation
 [NASA-CASE-MFS-22671-1] c35 N75-21582
 Method of and means for testing a tape
 record/playback system
 [NASA-CASE-MFS-22671-2] c35 N77-17426
WEAVER, L. B.
 Multiple in-line docking capability for rotating
 space stations
 [NASA-CASE-MFS-20855-1] c15 N77-10112
WEAVER, O.
 Charge injection method and apparatus of
 producing large area electrets
 [NASA-CASE-MFS-23186-1] c33 N76-23483
 Charge injection method and apparatus of
 producing large area electrets
 [NASA-CASE-MFS-23186-2] c24 N78-25137
WEBB, D. D.
 Sprayable low density ablator and application
 process
 [NASA-CASE-MFS-23506-1] c24 N78-24290
WEBB, D. L.
 Video sync processor Patent
 [NASA-CASE-KSC-10002] c10 N71-25865
 Electronic video editor
 [NASA-CASE-KSC-10003] c10 N73-13235
WEBB, J. A., JR.
 Circuit for detecting initial systole and
 diastolic notch
 [NASA-CASE-LEW-11581-1] c54 N75-13531
WEBB, J. B.
 Delayed simultaneous release mechanism
 [NASA-CASE-GSC-10814-1] c03 N73-20039
WEBBON, B.
 Pressure suit joint analyzer
 [NASA-CASE-ARC-11314-1] c54 N80-30043
WEBBON, B. E.
 Tubular sublimatory evaporator heat sink
 [NASA-CASE-ARC-10912-1] c34 N77-19353
 Spacesuit torso closure
 [NASA-CASE-ARC-11100-1] c54 N78-31736
 Cooling system for removing metabolic heat from
 an hermetically sealed spacesuit
 [NASA-CASE-ARC-11059-1] c54 N78-32721
WEBER, G. E.
 Method of making reinforced composite structure
 [NASA-CASE-LEW-12619-1] c24 N77-19171
WEBER, G. J.
 Multiple circuit protector device
 [NASA-CASE-XMS-02744] c33 N75-27249
 Fused switch
 [NASA-CASE-XMS-01244-1] c33 N79-33393
WEBER, L.
 Prevention of hydrogen embrittlement of high
 strength steel by hydrazine compositions
 [NASA-CASE-NPO-12122-1] c24 N76-14203
WEBER, B. J.
 Venting vapor apparatus Patent
 [NASA-CASE-XLB-00288] c15 N70-34247
 Supersonic-combustion rocket
 [NASA-CASE-LEW-11058-1] c20 N74-13502
WEBSTER, J. A.
 Perfluoro alkylene dioxy-bis-(4-phthalic
 anhydrides and
 oxy-bis-(perfluoroalkyleneoxyphthalic
 anhydrides
 [NASA-CASE-MFS-22356-1] c23 N75-30256
 Polyimides of ether-linked aryl tetracarboxylic
 dianhydrides
 [NASA-CASE-MFS-22355-1] c23 N76-15268
WEBSTER, L. D.
 Sidelooking laser altimeter for a flight simulator
 [NASA-CASE-ARC-11312-1] c36 N81-19439
WEERTON, J. E.
 Reinforced metallic composites Patent
 [NASA-CASE-XLB-02428] c17 N70-33288
 Method of making fiber reinforced metallic
 composites Patent
 [NASA-CASE-XLB-00231] c17 N70-38198
 Reinforced metallic composites Patent
 [NASA-CASE-XLB-00228] c17 N70-38490
 Method for producing fiber reinforced metallic
 composites Patent
 [NASA-CASE-XLB-03925] c18 N71-22894
 Process for producing dispersion strengthened
 nickel with aluminum Patent
 [NASA-CASE-XLB-06969] c17 N71-24142
 Method of producing refractory composites
 containing tantalum carbide, hafnium carbide,
 and hafnium boride Patent
 [NASA-CASE-XLB-03940] c18 N71-26153
 Method of making fiber composites
 [NASA-CASE-LEW-10424-2-2] c18 N72-25539
 Refractory metal base alloy composites
 [NASA-CASE-XLB-03940-2] c17 N72-28536
 Method for alleviating thermal stress damage in
 laminates
 [NASA-CASE-LEW-12493-1] c24 N81-17170
 Method for alleviating thermal stress damage in
 laminates
 [NASA-CASE-LEW-12493-2] c24 N81-26179
WEIDENHAMER, J. E.
 Isolation coupling arrangement for a torque
 measuring system
 [NASA-CASE-XLA-04897] c15 N72-22482
WEIDMAN, D. J.
 High intensity heat and light unit Patent
 [NASA-CASE-XLA-00141] c09 N70-33312
WEIDNER, J. P.
 Orbiter/launch system
 [NASA-CASE-LAR-12250-1] c14 N81-26161
WEIGAND, A. J.
 Texturing polymer surfaces by transfer casting
 [NASA-CASE-LEW-13120-1] c31 N81-16327
WEINGART, J. E.
 Stacked solar cell arrays
 [NASA-CASE-NPO-11771] c03 N73-20040
WEINSTEIN, L.
 Application of luciferase assay for ATP to
 antimicrobial drug susceptibility
 [NASA-CASE-GSC-12039-1] c51 N77-22794
 Determination of antimicrobial susceptibilities
 on infected urines without isolation
 [NASA-CASE-GSC-12046-1] c52 N79-14750
WEINSTEIN, M.
 Bonding thermoelectric elements to nonmagnetic
 refractory metal electrodes
 [NASA-CASE-XGS-04554] c15 N69-39786
 Segmenting lead telluride-silicon germanium
 thermoelements Patent
 [NASA-CASE-XGS-05718] c26 N71-16037
WEISS, P. P.
 Acquisition and tracking system for optical radar
 [NASA-CASE-MFS-20125] c16 N72-13437
WEISS, S.
 Pretreatment method for anti-wettable materials
 [NASA-CASE-XMS-03537] c15 N69-21471
WEITZEL, D. F.
 Propellant tank pressurization system Patent
 [NASA-CASE-XNP-00650] c27 N71-28929
WEITZEL, D. H.
 Resilience testing device Patent
 [NASA-CASE-XLA-08254] c14 N71-26161
WELCH, W. A.
 Gas filter mounting structure
 [NASA-CASE-MSC-12297] c14 N72-23457
WELLING, C. E.
 Thermally activated foaming compositions Patent
 [NASA-CASE-LAR-10373-1] c18 N71-26155
WELLMAN, J. B.
 Gas flow control device
 [NASA-CASE-NPO-11479] c15 N73-13462
WELLS, A. F.
 Water system virus detection
 [NASA-CASE-MSC-16098-1] c51 N79-10693
WELLS, B. R.
 Apparatus for ejection of an instrument cover
 [NASA-CASE-XNP-04132] c15 N69-27502

WELLS, F. E.
Positive displacement flowmeter Patent
[NASA-CASE-XMP-02822] c14 N70-41994
Remote control manipulator for zero gravity
environment
[NASA-CASE-MFS-14405] c15 N72-28495

WELLS, W. H.
Rotable accurate reflector system for telescopes
Patent
[NASA-CASE-NPO-10468] c23 N71-33229

WELLS, W. L.
Electric-arc heater Patent
[NASA-CASE-XLA-00330] c33 N70-34540

WENDT, A. J.
Rotating mandrel for assembly of inflatable
devices Patent
[NASA-CASE-XLA-04143] c15 N71-17687

WENZEL, G. E.
Amplifier drift tester
[NASA-CASE-XMS-05562-1] c09 N69-39986

WERNER, E. A.
Method and apparatus for making curved
reflectors Patent
[NASA-CASE-XLB-08917] c15 N71-15597
Apparatus for making curved reflectors Patent
[NASA-CASE-XLF-08917-2] c15 N71-24836

WESSELSKI, C. J.
Energy absorbing structure Patent Application
[NASA-CASE-MSC-12279-1] c15 N70-35679
Low onset rate energy absorber
[NASA-CASE-MSC-12279] c15 N72-17450

WEST, R. L.
Device for handling printed circuit cards Patent
[NASA-CASE-MFS-20453] c15 N71-29133

WEST, R. W., JR.
Method and apparatus for making a heat
insulating and ablative structure Patent
[NASA-CASE-XMS-02009] c33 N71-21834

WESTBROOK, R. H.
Electrode construction Patent
[NASA-CASE-ARC-10043-1] c05 N71-11193

WESTER, G. W.
The dc-to-dc converters employing
staggered-phase power switches with two-loop
control
[NASA-CASE-NPO-13512-1] c33 N77-10428
Phase substitution of spare converter for a
failed one of parallel phase staggered
converters
[NASA-CASE-NPO-13812-1] c33 N77-30365

WESTON, K. C.
Heat shield Patent
[NASA-CASE-XMS-00486] c33 N70-33344

WESTPHAL, J. A.
Method and apparatus for aligning a laser beam
projector Patent
[NASA-CASE-NPO-11087] c23 N71-25125

WETMORE, J. W.
Aircraft instrument Patent
[NASA-CASE-XLA-00487] c14 N70-40157

WETZLER, D. G.
Thrust-isolating mounting
[NASA-CASE-MFS-21680-1] c18 N74-27397

WEYLER, G. H., JR.
Rotatable mass for a flywheel
[NASA-CASE-MFS-23051-1] c37 N79-10422
Method of manufacture of bonded fiber flywheel
[NASA-CASE-MFS-23674-1] c24 N81-29163

WEZNER, F. S.
Collapsible reflector Patent
[NASA-CASE-XMS-03454] c09 N71-20658

WHEATLEY, D. G.
Hermetic sealed vibration damper Patent
[NASA-CASE-MSC-10959] c15 N71-26243

WHEELER, D. E.
Improved refractory coatings and method of
producing the same
[NASA-CASE-LBW-13169-1] c26 N80-14232

WHEELER, R. K.
Method and apparatus for stable silicon dioxide
layers on silicon grown in silicon nitride
ambient
[NASA-CASE-ERC-10073-1] c24 N74-15769

WHEELER, S.
Wind tunnel microphone structure Patent
[NASA-CASE-XNP-00250] c11 N71-26779

WHEELER, S. B.
Fluid containers and resealable septum therefor
Patent
[NASA-CASE-NPO-10123] c15 N71-24835

WHIPPLE, E. L.
Grain refinement control in TIG arc welding
[NASA-CASE-MSC-19095-1] c37 N75-19683

WHIPPLE, D. W.
Microcircuit negative cutter
[NASA-CASE-XLA-09843] c15 N72-27485

WHIPPLE, E. C., JR.
Method and apparatus for determining satellite
orientation utilizing spatial energy sources
Patent
[NASA-CASE-XGS-00466] c21 N70-34297

WHISENANT, J. T.
Inspection gage for boss Patent
[NASA-CASE-XMP-04966] c14 N71-17658

WHITACRE, H. E.
Quick release book tape Patent
[NASA-CASE-XMS-10660-1] c15 N71-25975
Scientific experiment flexible mount
[NASA-CASE-MSC-12372-1] c31 N72-25842

WHITCOMB, R. T.
Airfoil shape for flight at subsonic speeds
[NASA-CASE-LAR-10585-1] c02 N76-22154

WHITE, A. R.
Scientific experiment flexible mount
[NASA-CASE-MSC-12372-1] c31 N72-25842

WHITE, E. C.
Method of making pressurized panel Patent
[NASA-CASE-XLA-08916] c15 N71-29018
Pressurized panel
[NASA-CASE-XLA-08916-2] c14 N73-28487
Lightweight, variable solidity knitted parachute
fabric
[NASA-CASE-LAR-10776-1] c02 N74-10034

WHITE, F. A.
Coincidence apparatus for detecting particles
[NASA-CASE-XLA-07813] c14 N72-17328
A low energy electron magnetometer
[NASA-CASE-LAR-12706-1] c35 N81-19428

WHITE, J. A.
Magnetically centered liquid column float Patent
[NASA-CASE-XAC-00030] c14 N70-34820

WHITE, M. H.
Time delay and integration detectors using
charge transfer devices
[NASA-CASE-GSC-12324-1] c33 N81-33403

WHITE, P. E.
Solar tracking system
[NASA-CASE-MFS-23999-1] c44 N81-24520

WHITE, W. F.
Dual resonant cavity absorption cell Patent
[NASA-CASE-LAR-10305] c14 N71-26137
Resonant waveguide stark cell
[NASA-CASE-LAR-11352-1] c33 N75-26245

WHITE, W. T.
Method of bonding plasticized elastomer to metal
and article produced thereby
[NASA-CASE-MFS-25181-1] c27 N81-16238

WHITEHEAD, A. B.
Method and means for helium/hydrogen ratio
measurement by alpha scattering.
[NASA-CASE-NPO-14079-1] c25 N80-20334

WHITEHEAD, C. W.
Apparatus for inserting and removing specimens
from high temperature vacuum furnaces
[NASA-CASE-LAR-10841-1] c31 N74-27900

WHITFIELD, C. E.
Selective plating of etched circuits without
removing previous plating Patent
[NASA-CASE-XGS-03120] c15 N71-24047

WHITMORE, F. C.
Continuous magnetic flux pump
[NASA-CASE-XNP-01187] c15 N73-28516
Superconductive magnetic-field-trapping device
[NASA-CASE-XNP-01185] c26 N73-28710
Magnetic-flux pump
[NASA-CASE-XNP-01188] c15 N73-32361

WHITT, W. D.
General purpose rocket furnace
[NASA-CASE-MFS-23460-1] c12 N79-26075

WHITTEN, D. E.
Dual stage check valve
[NASA-CASE-MSC-13587-1] c15 N73-30459

WHITTENBERGER, J. D.
Zirconium modified nickel-copper alloy
[NASA-CASE-LBW-12245-1] c26 N77-20201

WIBERG, R. E.
Combustion products generating and metering device
[NASA-CASE-GSC-11095-1] c14 N72-10375

WIEBE, R. R.
Automatic thermal switch Patent
[NASA-CASE-INP-03796] c23 N71-15467
Helium refrigerator and method for
decontaminating the refrigerator
[NASA-CASE-NPO-10634] c23 N72-25619
Refrigerated coaxial coupling
[NASA-CASE-NPO-13504-1] c33 N75-30430
Helium refrigerator
[NASA-CASE-NPO-13435-1] c31 N76-14284
Multistation refrigeration system
[NASA-CASE-NPO-13839-1] c31 N78-25256

WIECH, B. R.
Zeta potential flowmeter Patent
[NASA-CASE-INP-06509] c14 N71-23226

WIKER, G. A.
Compact artificial hand
[NASA-CASE-NPO-13906-1] c54 N79-24652

WILEN, R. T.
Natural turbulence electrical power generator
[NASA-CASE-LAR-11551-1] c44 N80-29834

WILEY, F. L.
Temperature regulation circuit Patent
[NASA-CASE-INP-02792] c14 N71-28958

WILEY, P. H.
Logarithmic circuit with wide dynamic range
[NASA-CASE-GSC-12745-1] c33 N78-32339

WILGUS, D. S.
Adaptive voting computer system
[NASA-CASE-MSC-13932-1] c62 N74-14920

WILHELM, H. R.
Apparatus for extraction and separation of a
preferentially photo-dissociated molecular
isotope into positive and negative ions by
means of an electric field
[NASA-CASE-LEW-12465-1] c25 N78-25148

WILHITE, W. F.
Micropacked column for a chromatographic system
[NASA-CASE-INP-04816] c06 N69-39936

WILKEY, J. W., JR.
Velocity package Patent
[NASA-CASE-XLA-01339] c31 N71-15692

WILKINS, J. R.
Apparatus for microbiological sampling
[NASA-CASE-LAR-11069-1] c35 N75-12272
Automatic inoculating apparatus
[NASA-CASE-LAR-11074-1] c51 N75-13502
Automatic microbial transfer device
[NASA-CASE-LAR-11354-1] c35 N75-27330
Measurement of gas production of microorganisms
[NASA-CASE-LAR-11326-1] c35 N75-33368
Automated single-slide staining device
[NASA-CASE-LAR-11649-1] c51 N77-27677
Electrochemical detection device
[NASA-CASE-LAR-11922-1] c25 N79-24073
Indirect microbial detection
[NASA-CASE-LAR-12520-1] c51 N81-28698
Apparatus and process for microbial detection
and enumeration
[NASA-CASE-LAR-12709-1] c51 N81-29727

WILL, H. A.
Process for fabricating SiC semiconductor devices
[NASA-CASE-LEW-12094-1] c76 N76-25049

WILL, R. B.
Attitude control and damping system for
spacecraft Patent
[NASA-CASE-XLA-02551] c21 N71-21708

WILLIAMS, B. A.
Thermistor holder for skin temperature
measurements
[NASA-CASE-ARC-10855-1] c52 N77-10780
Liquid cooled brassiere and method of diagnosing
malignant tumors therewith
[NASA-CASE-ARC-11007-1] c52 N77-14736
Cooling system for removing metabolic heat from
an hermetically sealed spacesuit
[NASA-CASE-ARC-11059-1] c54 N78-32721

WILLIAMS, D. D.
Apparatus for changing the orientation and
velocity of a spinning body traversing a path
Patent
[NASA-CASE-HQN-00936] c31 N71-29050

WILLIAMS, D. B.
Low temperature aluminum alloy Patent
[NASA-CASE-INP-02786] c17 N71-20743

WILLIAMS, E. F.
Automatic liquid inventory collecting and
dispensing unit
[NASA-CASE-LAR-11071-1] c35 N75-15611

WILLIAMS, J. G.
Light regulator
[NASA-CASE-LAR-10836-1] c26 N72-27784
Light intensity strain analysis
[NASA-CASE-LAR-10765-1] c32 N73-20740

WILLIAMS, J. R.
Holographic thin film analyzer
[NASA-CASE-MPS-20823-1] c16 N73-30476

WILLIAMS, L. A.
Apparatus for electrolytically tapered or
contoured cavities
[NASA-CASE-INP-08835-1] c37 N80-14395

WILLIAMS, L. A., JR.
Fluid velocity measuring device
[NASA-CASE-LAR-11729-1] c34 N79-12359

WILLIAMS, M. D.
Measurement of time differences between luminous
events Patent
[NASA-CASE-XLA-01987] c23 N71-23976
Volumetric direct nuclear pumped laser
[NASA-CASE-LAR-12183-1] c36 N79-18307

WILLIAMS, M. L.
Non-destructive method for applying and removing
instrumentation on helicopter rotor blades
[NASA-CASE-LAR-11201-1] c35 N78-24515

WILLIAMS, S. R.
Bidirectional step torque filter with zero
backlash characteristic Patent
[NASA-CASE-XGS-04227] c15 N71-21744

WILLIAMS, T. E.
System for and method of freezing biological
tissue
[NASA-CASE-GSC-12173-1] c51 N79-10694

WILLIAMS, W. F.
System for interference signal nulling by
polarization adjustment
[NASA-CASE-NPO-13140-1] c32 N75-24982
Dual band combiner for horn antenna
[NASA-CASE-NPO-14519-1] c32 N80-23524

WILLIS, A. E.
Static inverters which sum a plurality of waves
Patent
[NASA-CASE-INP-00663] c08 N71-18752

WILLNER, E.
Inverter oscillator with voltage feedback
[NASA-CASE-NPO-10760] c09 N72-25254

WILNER, B. E.
Electrolytically regenerative hydrogen-oxygen
fuel cell Patent
[NASA-CASE-XLE-04526] c03 N71-11052

WILSON, A. B.
Vehicular impact absorption system
[NASA-CASE-NPO-14014-1] c37 N79-10420

WILSON, D. J.
Wind measurement system
[NASA-CASE-MPS-23362-1] c47 N77-10753

WILSON, E. H.
Wind tunnel
[NASA-CASE-LAR-10135-1] c09 N79-21083

WILSON, I. J.
Method of producing complex aluminum alloy parts
of high temper, and products thereof
[NASA-CASE-MSC-19693-1] c26 N78-24333

WILSON, J. C.
Exhaust flow deflector
[NASA-CASE-LAR-11570-1] c34 N76-18364

WILSON, L. B.
Phase modulating with odd and even finite power
series of a modulating signal
[NASA-CASE-LAR-11607-1] c32 N77-14292

WILSON, M. L.
Nondestructive spot test method for titanium and
titanium alloys
[NASA-CASE-LAR-10539-1] c17 N73-12547
Nondestructive spot test method for magnesium
and magnesium alloys
[NASA-CASE-LAR-10953-1] c17 N73-27446

WILSON, M. E., JR.
Space simulator Patent
[NASA-CASE-INP-00459] c11 N70-38675

WILSON, R. E.
Automatic pump Patent
[NASA-CASE-INP-04731] c15 N71-24042

WILSON, R. L.
Twin-capacitive shaft angle encoder with analog
output signal
[NASA-CASE-ARC-10897-1] c33 N77-31404

WILSON, T. G.
Regulated dc-to-dc converter for voltage step-up

or step-down with input-output isolation
[NASA-CASE-HQN-10792-1] c33 N74-11049

WILSON, T. L.
Automatic flowmeter calibration system
[NASA-CASE-KSC-11076-1] c34 N81-26402

WILSON, W. A.
Methods and apparatus employing vibratory energy
for wrenching Patent
[NASA-CASE-MFS-20586] c15 N71-17686

WILSON, W. O.
Rocket chamber leak test fixture
[NASA-CASE-XPR-09479] c14 N69-27503

WINBER, R. T.
Silicide coatings for refractory metals Patent
[NASA-CASE-XLE-10910] c18 N71-29040

WINBLADE, R. L.
Energy management system for glider type vehicle
Patent
[NASA-CASE-XPR-00756] c02 N71-13421

WING, L. D.
Automatic thermal switch
[NASA-CASE-GSC-12415-1] c34 N80-18338
Automatic thermal switch
[NASA-CASE-GSC-12553-1] c33 N80-21671

WINGFIELD, G. A.
Resonant waveguide stark cell
[NASA-CASE-LAR-11352-1] c33 N75-26245

WINIARSKI, P. J.
Wabble gear drive mechanism
[NASA-CASE-WOO-00625] c37 N78-17385

WINITZ, H.
Amino acid analysis
[NASA-CASE-NPO-12130-1] c25 N75-14844
Reduction of blood serum cholesterol
[NASA-CASE-NPO-12119-1] c52 N75-15270

WINKELSTEIN, R. A.
Noninterruptable digital counting system Patent
[NASA-CASE-XNP-09759] c08 N71-24891
Controlled oscillator system with a time
dependent output frequency
[NASA-CASE-NPO-11962-1] c33 N74-16194
Baseband signal combiner for large aperture
antenna array
[NASA-CASE-NPO-14641-1] c32 N81-29308

WINKLER, C. E.
Static inverters which sum a plurality of waves
Patent
[NASA-CASE-XMP-00663] c08 N71-16752

WINKLER, H. E.
Electrophotolysis oxidation system for
measurement of organic concentration in water
[NASA-CASE-MSC-16497-1] c25 N79-23167
Biomedical flow sensor
[NASA-CASE-MSC-18761-1] c52 N81-24717

WINKLER, T.
AC logic flip-flop circuits Patent
[NASA-CASE-XGS-00823] c10 N71-15910

WINE, L. E.
Ellipsograph for pantograph Patent
[NASA-CASE-XLA-03102] c14 N71-21079
Lathe tool bit and holder for machining
fiberglass materials
[NASA-CASE-XLA-10470] c15 N72-21489
Liquid waste feed system
[NASA-CASE-LAR-10365-1] c05 N72-27102

WINTUCKY, E. G.
Ion sputter textured graphite
[NASA-CASE-LEW-12919-1] c24 N81-27198

WIRTH, M. M.
Selective data segment monitoring system
[NASA-CASE-ARC-10899-1] c60 N77-19760

WISANDER, D. W.
Laser surface fusion of plasma sprayed ceramic
turbine seals
[NASA-CASE-LEW-13269-1] c27 N81-22190

WISE, R. C.
Space suit
[NASA-CASE-MSC-12609-1] c05 N73-32012

WISE, T. E.
Microwave dichroic plate
[NASA-CASE-GSC-12171-1] c33 N79-28416

WITHEROW, W. K.
Dual laser optical system and method for
studying fluid flow
[NASA-CASE-MFS-25315-1] c36 N81-19440
Method of and apparatus for double-exposure
holographic interferometry
[NASA-CASE-MFS-25405-1] c35 N81-27459

WITTE, R. S.
Gas ion laser construction for electrically
isolating the pressure gauge thereof
[NASA-CASE-MFS-22597] c36 N78-17366

WITTMANN, A. E.
Method of coating circuit paths on printed
circuit boards with solder Patent
[NASA-CASE-XMP-01599] c09 N71-20705

WITROCK, E. P.
Metal shearing energy absorber
[NASA-CASE-HQN-10638-1] c15 N73-30460

WITZKE, W. E.
Apparatus for making a metal slurry product Patent
[NASA-CASE-XLE-00010] c15 N70-33382
High toughness-high strength iron alloy
[NASA-CASE-LEW-12542-1] c26 N77-24254
Process for making a high toughness-high
strength iron alloy
[NASA-CASE-LEW-12542-2] c26 N79-22271
High toughness-high strength iron alloy
[NASA-CASE-LEW-12542-3] c26 N80-32484

WOBIG, O. A.
Fluid power transmission Patent
[NASA-CASE-XMS-01445] c12 N71-16031
Apparatus for machining geometric cones Patent
[NASA-CASE-XMS-04292] c15 N71-22722

WOELLER, F. H.
Chelate-modified polymers for atmospheric gas
chromatography
[NASA-CASE-ARC-11154-1] c25 N80-23383

WOJCIASINSKI, R. J.
Lightning tracking system
[NASA-CASE-KSC-10729-1] c09 N73-32110
Automatic lightning detection and photographic
system
[NASA-CASE-KSC-10728-1] c14 N73-32319
Electric field measuring and display system
[NASA-CASE-KSC-10731-1] c33 N74-27862
Lightning current measuring systems
[NASA-CASE-KSC-10807-1] c33 N75-26246
Lightning current waveform measuring system
[NASA-CASE-KSC-11018-1] c33 N79-10337

WOLCZOK, J. M.
Wideband heterodyne receiver for laser
communication system
[NASA-CASE-GSC-12053-1] c32 N77-28346

WOLF, C. B.
Method of producing silicon
[NASA-CASE-NPO-14382-1] c31 N80-18231

WOLF, F. T.
Air bearing
[NASA-CASE-WLP-10002] c15 N72-17451

WOLFE, J. F.
Thermoset-thermoplastic aromatic polyamides
[NASA-CASE-LAR-12723-1] c27 N81-15107

WOLFF, J. H.
High speed binary to decimal conversion system
Patent
[NASA-CASE-XGS-01230] c08 N71-19544

WOLLER, J. A.
Evacuation port seal Patent
[NASA-CASE-XMP-03290] c15 N71-23256

WOLOWICZ, C. H.
Free wing assembly for an aircraft
[NASA-CASE-FRC-10092-1] c05 N79-12061

WOLTHUIS, R. A.
Contourograph system for monitoring
electrocardiograms
[NASA-CASE-MSC-13407-1] c10 N72-20225
Apparatus and method for processing Korotkov
sounds
[NASA-CASE-MSC-13999-1] c52 N74-26626

WONG, R. Y.
Plurality of photosensitive cells on a
pyramidal base for planetary trackers
[NASA-CASE-XNP-04180] c07 N69-39736
Apparatus for absorbing and measuring power Patent
[NASA-CASE-XLE-00720] c14 N70-40201
Television signal processing system Patent
[NASA-CASE-NPO-10140] c07 N71-24742
Video signal enhancement system with dynamic
range compression and modulation index
expansion Patent
[NASA-CASE-NFO-10343] c07 N71-27341

WONG, W. J.
Phase protection system for ac power lines
[NASA-CASE-MSC-17832-1] c33 N74-14956

WOO, K. E.
High impact antenna Patent

[NASA-CASE-NPO-10231] c07 N71-26101
 Multi-purpose antenna employing dish reflector
 with plural coaxial horn feeds
 [NASA-CASE-NPO-11264] c07 N72-25174

WOO, B. T.
 Low loss dichroic plate
 [NASA-CASE-NPO-13171-1] c32 N74-11000

WOOD, A. D.
 Transient heat transfer gauge Patent
 [NASA-CASE-XNP-09802] c33 N71-15641

WOOD, C. E.
 Gas ion laser construction for electrically
 isolating the pressure gauge thereof
 [NASA-CASE-NFS-22597] c36 N78-17366

WOOD, G. E.
 Simultaneous acquisition of tracking data from
 two stations
 [NASA-CASE-NPO-13292-1] c32 N75-15854

WOOD, G. E., JR.
 Gas analyzer for bi-gaseous mixtures Patent
 [NASA-CASE-XLA-01131] c14 N71-10774

WOOD, G. P.
 Plasma accelerator Patent
 [NASA-CASE-XLA-00675] c25 N70-33267

WOOD, J. W.
 Broadband video process with very high input
 impedance
 [NASA-CASE-NPO-10199] c09 N72-17156

WOOD, K. E.
 High temperature penetrator assembly with
 bayonet plug and ramp-activated lock
 [NASA-CASE-MSC-18526-1] c35 N80-19468
 Apparatus for accurately preloading auger
 attachment means for frangible protective
 material
 [NASA-CASE-MSC-18791-1] c37 N81-24446

WOOD, L. L.
 Continuous plasma light source
 [NASA-CASE-XNP-04167-2] c25 N72-24753
 Continuous plasma laser
 [NASA-CASE-XNP-04167-3] c36 N77-19416

WOOD, P. C.
 Process for the preparation of calcium superoxide
 [NASA-CASE-ABC-11053-1] c25 N79-10162
 Use of glow discharge in fluidized beds
 [NASA-CASE-ABC-11245-1] c33 N80-11326

WOOD, R. A.
 Low temperature aluminum alloy Patent
 [NASA-CASE-XNP-02786] c17 N71-20743

WOOD, R. C.
 Apparatus for sampling particulates in gases
 [NASA-CASE-HQN-10037-1] c14 N73-27376

WOODBURY, R. C.
 Noise limiter Patent
 [NASA-CASE-NPO-10169] c10 N71-24844
 Gated compressor, distortionless signal limiter
 [NASA-CASE-NPO-11820-1] c32 N74-19788
 Apparatus for scanning the surface of a
 cylindrical body
 [NASA-CASE-NPO-11861-1] c36 N74-20009

WOODGATE, B. E.
 Method and apparatus for slicing crystals
 [NASA-CASE-GSC-12291-1] c76 N80-18951

WOODIE, P. E.
 Thermal conductive connection and method of
 making same Patent
 [NASA-CASE-XMS-02087] c09 N70-41717

WOODS, G. J.
 Electronic checkout system for space vehicles
 Patent
 [NASA-CASE-XKS-08012-2] c31 N71-15566

WOODS, G. M., JR.
 Instrument for measuring potentials on two
 dimensional electric field plots Patent
 [NASA-CASE-XLA-08493] c10 N71-15421
 A low energy electron magnetometer
 [NASA-CASE-LAR-12706-1] c35 N81-19428

WOODS, J. M.
 Powerplexer
 [NASA-CASE-MSC-12396-1] c03 N73-31588

WOOLFSOW, M. G.
 Linear sawtooth voltage-wave generator employing
 transistor timing circuit having
 capacitor-zener diode combination feedback
 Patent
 [NASA-CASE-XMS-01315] c09 N70-41675
 Pulse modulator providing fast rise and fall
 times Patent
 [NASA-CASE-XMS-04919] c09 N71-23270

Multiple slope sweep generator Patent
 [NASA-CASE-XMS-03542] c09 N71-28926

WOOLLAM, J. A.
 Hall effect magnetometer
 [NASA-CASE-LEW-11632-2] c35 N75-13213
 Atomic hydrogen storage method and apparatus
 [NASA-CASE-LEW-12081-1] c28 N78-24365
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 [NASA-CASE-LEW-12081-2] c28 N80-20402
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WORMON, D. E.
 Leading edge curvature based on convective
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 [NASA-CASE-XLA-01486] c01 N71-23497

WORTHMAN, J. J.
 Semiconductor p-n junction stress and strain
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 [NASA-CASE-XLA-04980] c09 N69-27422
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WRIGHT, D. B.
 Method for measuring cutaneous sensory perception
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WRIGHT, D. E.
 Penetrating radiation system for detecting the
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 [NASA-CASE-MSC-12280] c27 N71-16348

WRIGHT, E. E., JR.
 System for sterilizing objects
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WRIGHT, L. M.
 Vibrophonocardiograph Patent
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WRIGHT, W. H.
 Voltage regulator with plural parallel power
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 [NASA-CASE-GSC-10891-1] c10 N71-26626
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WRINKLE, W. W.
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WU, V. C.
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 [NASA-CASE-MSC-18759-1] c52 N81-24716

WUEHSCHE, H. P.
 Recoverable rocket vehicle Patent
 [NASA-CASE-XMF-00389] c31 N70-34176
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 [NASA-CASE-MPS-20410] c15 N71-19214
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 [NASA-CASE-MPS-14710] c09 N72-22195

WUERKER, B. F.
 Spatial filter for Q-switched lasers
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WYBLE, C. W.
 Thermal conductive connection and method of
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 [NASA-CASE-XMS-02087] c09 N70-41717

WYDEVEN, T.
 Preparation of dielectric coating of variable
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 [NASA-CASE-ABC-10892-2] c27 N79-14214
 Use of glow discharge in fluidized beds
 [NASA-CASE-ABC-11245-1] c33 N80-11326

WYDEVEN, T. J.
 Process for the preparation of calcium superoxide
 [NASA-CASE-ABC-11053-1] c25 N79-10162
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 [NASA-CASE-ABC-10975-1] c33 N79-15245
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 [NASA-CASE-ABC-10915-2] c27 N79-18052
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 [NASA-CASE-ABC-10980-1] c27 N80-23452

HYDEVEN, T. J., JR.

Method of preparing water purification membranes
[NASA-CASE-ARC-10643-1] c25 N75-12087
Abrasion resistant coatings for plastic surfaces
[NASA-CASE-ARC-10915-3] c24 N77-24200
HYLIE, G. H.
Sealed battery gas manifold construction Patent
[NASA-CASE-XNP-03378] c03 N71-11051
HYMAN, C. L.
Acquisition and tracking system for optical radar
[NASA-CASE-MFS-20125] c16 N72-13437
Strain gauge ambiguity sensor for segmented
mirror active optical system
[NASA-CASE-MFS-20506-1] c35 N75-12273
System for the measurement of ultra-low stray
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[NASA-CASE-MFS-23513-1] c74 N79-11865
HYNVEEN, B. A.
Iodine generator for reclaimed water purification
[NASA-CASE-MSC-14632-1] c54 N78-14784
HYSOCKI, J. J.
Radiation resistant silicon semiconductor
devices Patent
[NASA-CASE-XGS-07801] c09 N71-12513

Y

YAGER, S. P.
Piping arrangement through a double chamber
structure
[NASA-CASE-XNP-08882] c15 N69-39935
YAMAKAWA, K. A.
A method for producing a solidified body of
silicon
[NASA-CASE-NPO-15250-1] c25 N81-16174
YANAGITA, H.
Rhomboid prism pair for rotating the plane of
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[NASA-CASE-ARC-11311-1] c74 N81-16882
YANG, C. Y.
Zirconium carbide as an electrocatalyst for the
chromous/chromic redox couple
[NASA-CASE-LEW-13246-1] c25 N81-26203
YANG, L. C.
Optically actuated two position mechanical mover
[NASA-CASE-NPO-13105-1] c37 N74-21060
Optically detonated explosive device
[NASA-CASE-NPO-11743-1] c28 N74-27425
Compact pulsed laser having improved heat
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[NASA-CASE-NPO-13147-1] c36 N77-25502
Seismic vibration source
[NASA-CASE-NPO-14112-1] c46 N79-22679
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[NASA-CASE-NPO-14255-1] c46 N79-23555
Portable heatable container
[NASA-CASE-NPO-14237-1] c44 N80-20808
Method and device for destructive detection of a
substance
[NASA-CASE-NPO-14940-1] c35 N80-21723
YANG, P. H.
Fluid power transmitting gas bearing Patent
[NASA-CASE-ERC-10097] c15 N71-28465
YASUI, R. K.
Solar cell submodule Patent
[NASA-CASE-XNP-05821] c03 N71-11056
Solar cell matrix Patent
[NASA-CASE-NPO-10821] c03 N71-19545
Solar cell matrix
[NASA-CASE-NPO-11190] c03 N71-34044
Stacked solar cell arrays
[NASA-CASE-NPO-11771] c03 N73-20040
Solar cell grid patterns
[NASA-CASE-NPO-13087-2] c44 N76-31666
Solar array strip and a method for forming the
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[NASA-CASE-NPO-13652-1] c44 N79-17314
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[NASA-CASE-NPO-13652-2] c44 N79-24431
Method for forming a solar array strip
[NASA-CASE-NPO-13652-3] c44 N80-14474
YEAGER, P. R.
Gas analyzer for bi-gaseous mixtures Patent
[NASA-CASE-XLA-01131] c14 N71-10774
Thermopile vacuum gage tube simulator Patent
[NASA-CASE-XLA-02758] c14 N71-18481
Fast scan control for deflection type mass
spectrometers
[NASA-CASE-LAR-11428-1] c35 N74-34857

YEH, C.

Fiber distributed feedback laser
[NASA-CASE-NPO-13531-1] c36 N76-24553
YEH, Y. C. H.
Schottky barrier cell and method of fabricating it
[NASA-CASE-NPO-13689-4] c44 N81-26553
Schottky barrier solar cell
[NASA-CASE-NPO-13689-2] c44 N81-29525
YEH, H. C.
Superconducting gyrocon for high power high
efficiency microwave generator/amplifier
application
[NASA-CASE-NPO-14975-1] c33 N80-29584
YEH, S. P. S.
Ion-exchange hollow fibers
[NASA-CASE-NPO-13309-1] c25 N81-19244
YIH, L. I.
Low intensity X-ray and gamma-ray imaging device
[NASA-CASE-GSC-12263-1] c74 N79-20857
Low intensity X-ray and gamma-ray imaging
spectrometer
[NASA-CASE-GSC-12587-1] c35 N80-29635
YOSHINO, S. Y.
Bonding or repairing process
[NASA-CASE-MSC-12357] c15 N73-12489
YOST, V. H.
Apparatus for welding torch angle and seam
tracking control Patent
[NASA-CASE-XNP-03287] c15 N71-15607
YOST, W. T.
Liquid-immersible electrostatic ultrasonic
transducer
[NASA-CASE-LAB-12465-1] c35 N80-18363
YOUNG, A. L.
Control valve and co-axial variable injector
Patent
[NASA-CASE-XNP-09702] c15 N71-17654
Semitoroidal diaphragm cavitating valve Patent
[NASA-CASE-XNP-09704] c12 N71-18615
YOUNG, D. B.
Skeletal stressing method and apparatus Patent
[NASA-CASE-ARC-10100-1] c05 N71-24738
Programmable physiological infusion
[NASA-CASE-ARC-10447-1] c52 N74-22771
YOUNG, R.
Radio frequency shielded enclosure Patent
[NASA-CASE-XNF-09422] c07 N71-19436
YOUNG, L. R.
Display research collision warning system
[NASA-CASE-HQN-10703] c21 N73-13643
Adaptive polarization separation
[NASA-CASE-LAR-12196-1] c33 N81-26358
YOUNG, R. H.
Ac power amplifier Patent Application
[NASA-CASE-LAR-10218-1] c09 N70-34559
Automatic balancing device Patent
[NASA-CASE-LAR-10774] c10 N71-13545
Independent power generator
[NASA-CASE-LAR-11208-1] c44 N78-32539
Electrochemical detection device
[NASA-CASE-LAR-11922-1] c25 N79-24073
YOUNG, S. G.
A silicon-slurry/aluminide coating
[NASA-CASE-LEW-13343-1] c24 N80-26389
YOUNG, W. J.
Phonocardiograph transducer Patent
[NASA-CASE-XMS-05365] c14 N71-22993
YOUNG, W. R.
Apparatus for measuring an aircraft's speed and
height
[NASA-CASE-LAR-12275-1] c35 N79-18296
YOUNGBLUTH, O., JR.
Method and apparatus for mapping the sensitivity
of the face of a photodetector specifically a
PMT
[NASA-CASE-LAR-10320-1] c09 N72-23172
Versatile LDV burst simulator
[NASA-CASE-LAR-11859-1] c35 N79-14349
YOUNGBRANS, J. L.
Curved centerline air intake for a gas turbine
engine
[NASA-CASE-LEW-13201-1] c07 N81-14999
YU, I. P.
Multiple band circularly polarized microstrip
antenna
[NASA-CASE-MSC-18334-1] c32 N80-32604

Z

- ZABOWER, H. R.
Hand-held photomicroscope
[NASA-CASE-ARC-10468-1] c14 N73-33361
- ZABLAVA, B. A.
Vacuum probe surface sampler
[NASA-CASE-LAB-10623-1] c14 N73-3C395
- ZAPLATYNSKY, I.
Castable high temperature refractory materials
[NASA-CASE-LEW-13080-1] c27 N80-29496
- ZAREMBA, J. G.
Passive caging mechanism Patent
[NASA-CASE-GSC-10306-1] c15 N71-24694
- ZARETSKY, E. V.
Method of improving the reliability of a rolling
element system Patent
[NASA-CASE-XLE-02999] c15 N71-16052
- ZAVADA, E. J.
Frangible tube energy dissipation Patent
[NASA-CASE-XLA-00754] c15 N70-34850
- ZAVIANTSEFF, V.
Apparatus for ionization analysis
[NASA-CASE-ARC-10017-1] c14 N72-29464
- ZAWAB, H. W.
Filtering device
[NASA-CASE-MFS-22729-1] c32 N76-21366
- ZEBROWSKI, Z. E.
Attitude control system for sounding rockets
Patent
[NASA-CASE-XGS-01654] c31 N71-24750
- ZEBUS, P. P.
Adjustable securing base
[NASA-CASE-MSC-19666-1] c37 N78-17383
Variable contour securing system
[NASA-CASE-MSC-16270-1] c37 N78-27423
- ZEIGER, R. J.
Concentric differential gearing arrangement
[NASA-CASE-ARC-10462-1] c37 N74-27901
- ZELLNER, G. J.
Gas cooled high temperature thermocouple Patent
[NASA-CASE-XLE-09475-1] c33 N71-15568
- ZEMAN, J. R.
Lamp modulator
[NASA-CASE-KSC-10565] c09 N72-25250
- ZERGEE, R. S.
Constant temperature heat sink for calorimeters
Patent
[NASA-CASE-XMF-04208] c33 N71-29051
- ZERLAUT, G. A.
Stabilized zinc oxide coating compositions Patent
[NASA-CASE-XMF-07770-2] c18 N71-26772
Synthesis of zinc titanate pigment and coatings
containing the same
[NASA-CASE-MFS-13532] c18 N72-17532
- ZIEMKE, E. C.
Constant temperature heat sink for calorimeters
Patent
[NASA-CASE-XMF-04208] c33 N71-29051
- ZIMMERMAN, B. G.
Sun tracker with rotatable plane-parallel plate
and two photocells Patent
[NASA-CASE-XGS-01159] c21 N71-10678
Gravity gradient attitude control system Patent
[NASA-CASE-GSC-10555-1] c21 N71-27324
Passive dual spin misalignment compensators
[NASA-CASE-GSC-11479-1] c35 N74-28097
- ZIMMERMAN, E. F.
Apparatus for applying cover slides
[NASA-CASE-NPO-10575] c03 N72-25019
- ZIMMERMAN, J. E.
Coal-shale interface detection system
[NASA-CASE-MFS-23720-2] c43 N80-14423
- ZIMMERMAN, P. A.
Chassis unit insert tightening-extract device
[NASA-CASE-XMS-01077-1] c37 N79-33467
- ZIMMERMAN, R. L.
Thermally operated valve Patent
[NASA-CASE-XLE-00815] c15 N70-35407
Double optic system for ion engine Patent
[NASA-CASE-XNP-02839] c28 N70-41922
- ZIOLEKOWSKI, A. J.
Multi-lobar scan horizon sensor Patent
[NASA-CASE-XGS-00809] c21 N70-35427
- ZLATKIS, A.
Analysis of volatile organic compounds
[NASA-CASE-MSC-14428-1] c23 N77-17161
- ZHODA, L. J.
Safety-type locking pin
[NASA-CASE-MFS-18495] c15 N72-11385
- ZHUIDZINAS, J. S.
Stabilization of He₂(a Σ ³ Sigma u⁺ molecules in
liquid helium by optical pumping for vacuum UV
laser 6
[NASA-CASE-NPO-13993-1] c72 N79-13826
- ZOHAR, S.
Counting digital filters
[NASA-CASE-NPO-11821-1] c08 N73-26175
- ZOOK, R. A.
Meteoroid capture cell construction
[NASA-CASE-MSC-12423-1] c91 N76-30131
- ZORUMSKI, W. E.
Remote controlled tubular disconnect Patent
[NASA-CASE-XLA-01396] c03 N71-12259
Noise suppressor
[NASA-CASE-LAB-11141-1] c07 N74-32418
- ZOTTARELLI, L. J.
Magnetic core current steering commutator Patent
[NASA-CASE-NPO-10201] c08 N71-18694
Drive circuit utilizing two cores Patent
[NASA-CASE-XNP-01318] c10 N71-23033
Current steering switch Patent
[NASA-CASE-XNP-08567] c09 N71-26000
Digital memory in which the driving of each word
location is controlled by a switch core Patent
[NASA-CASE-XNP-01466] c10 N71-26434
- ZRUBEK, W. E.
System for monitoring signal amplitude ranges
[NASA-CASE-XMS-04061-1] c09 N69-39885
- ZUCCARO, J. J.
Electrode construction Patent
[NASA-CASE-ARC-10043-1] c05 N71-11193
- ZUCKERMAN, A. J.
Instrumentation for measurement of aircraft
noise and sonic boom
[NASA-CASE-LAB-11173-1] c35 N75-19614
Instrumentation for measuring aircraft noise and
sonic boom
[NASA-CASE-LAB-11476-1] c07 N76-27232
Differential sound level meter
[NASA-CASE-LAB-12106-1] c71 N78-14867
High-temperature microphone system
[NASA-CASE-LAB-12375-1] c32 N79-24203
- ZURASKY, J. L.
Monitoring deposition of films
[NASA-CASE-MFS-20675] c26 N73-26751
- ZWIENER, J. H.
Real time reflectometer
[NASA-CASE-MFS-23118-1] c35 N77-31465
- ZYGIELBAUM, A. I.
Communications link for computers
[NASA-CASE-NPO-11161] c08 N72-25207
Digital video display system using cathode ray
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[NASA-CASE-NPO-11342] c09 N72-25248
Numerical computer peripheral interactive device
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[NASA-CASE-NPO-11497] c08 N73-25206
Digital demodulator-correlator
[NASA-CASE-NPO-13982-1] c32 N79-14267

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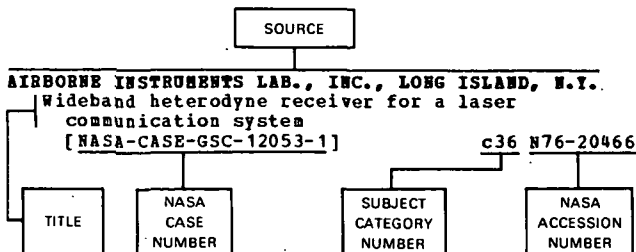
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Section 2

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AEROFLEX LABS., INC., PLAINVIEW, N. Y.
Rotary actuator
[NASA-CASE-NPO-10244] c15 N72-26371

AEROJET-GENERAL CORP., EL MONTE, CALIF.
High-speed infrared furnace
[NASA-CASE-XLE-10466] c17 N69-25147

Ammonium perchlorate composite propellant containing an organic transitional metal chelate catalytic additive Patent
[NASA-CASE-LAR-10173-1] c27 N71-14090

Swirling flow nozzle Patent
[NASA-CASE-IXP-03692] c28 N71-24321

Automatic battery charger Patent
[NASA-CASE-IXP-04758] c03 N71-24605

Attitude control system for sounding rockets Patent
[NASA-CASE-XGS-01654] c31 N71-24750

Tensile strength testing device Patent
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Hydroforming techniques using epoxy molds Patent
[NASA-CASE-XLE-05641-1] c15 N71-26346

Electrical apparatus for detection of thermal decomposition of insulation Patent
[NASA-CASE-IXP-03968] c14 N71-27186

Method and apparatus for nondestructive testing of pressure vessels
[NASA-CASE-NPO-12142-1] c38 N76-28563

AEROJET-GENERAL CORP., GLENDALE, CALIF.
Rotating shaft seal Patent
[NASA-CASE-IXP-02862-1] c15 N71-26294

AEROJET-GENERAL CORP., SACRAMENTO, CALIF.
Process of forming particles in a cryogenic path Patent
[NASA-CASE-NPO-10250] c23 N71-16212

AERONAUTICAL RESEARCH ASSOCIATES OF PRINCETON, INC., N. J.
Integrated lift/drag controller for aircraft
[NASA-CASE-ARC-10456-1] c05 N75-12930

AIR PRODUCTS AND CHEMICALS, INC., PHILADELPHIA, PA.
Low heat leak connector for cryogenic system
[NASA-CASE-XLE-02367-1] c31 N79-21225

AIRBORNE INSTRUMENTS LAB., DEER PARK, N. Y.
High-Q bandpass resonators utilizing bandstop resonator pairs
[NASA-CASE-GSC-10990-1] c09 N73-26195

AIRRESEARCH MFG. CO., TORRANCE, CALIF.
Adaptive control system for line-commutated inverters
[NASA-CASE-MFS-25209-1] c33 N81-31480

AIRTECHNICS, INC., WASHINGTON, D.C.
Protection for energy conversion systems

[NASA-CASE-IGS-04808] c03 N69-25146
Inverter with means for base current shaping for sweeping charge carriers from base region Patent
[NASA-CASE-IGS-06226] c10 N71-25950

AMERICAN AIR FILTER CO., INC., ST. LOUIS, MO.
Gas filter mounting structure
[NASA-CASE-MSC-12297] c14 N72-23457

AMERICAN OPTICAL CO., PITTSBURGH, PA.
Telespectrograph Patent
[NASA-CASE-XLA-03273] c14 N71-18699

AMERICAN OPTICAL CO., SOUTHBRIDGE, MASS.
Pneumatic mirror support system
[NASA-CASE-XLA-03271] c11 N69-24321

AMERICAN SCIENCE AND ENGINEERING, INC., CAMBRIDGE, MASS.
X-ray reflection collimator adapted to focus X-radiation directly on a detector Patent
[NASA-CASE-XHQ-04106] c14 N70-40240

ANPEX CORP., REDWOOD CITY, CALIF.
Method for making conductors for ferrite memory arrays
[NASA-CASE-LAR-10994-1] c24 N75-13032

ANOCUT ENGINEERING CO., CHICAGO, ILL.
Apparatus for electrolytically tapered or contoured cavities
[NASA-CASE-IXP-08835-1] c37 N80-14395

APPLIED MAGNETICS CORP., GOLETA, CALIF.
Magnetic recording head and method of making same Patent
[NASA-CASE-GSC-10097-1] c08 N71-27210

APPLIED PHYSICS LAB., JOHNS HOPKINS UNIV., LAUREL, MD.
Open loop digital frequency multiplier
[NASA-CASE-MSC-12709-1] c33 N77-24375

APPLIED PHYSICS LAB., JOHNS HOPKINS UNIV., SILVER SPRING, MD.
Telenetry synchronizer
[NASA-CASE-GSC-11868-1] c17 N76-22245

High speed, glitch-free digital to analog converter
[NASA-CASE-GSC-12319-1] c60 N79-32852

APPLIED SPACE PRODUCTS, INC., PALO ALTO, CALIF.
Intumescent paints Patent
[NASA-CASE-ARC-10099-1] c18 N71-15469

ASTRO RESEARCH CORP., CARPINTERIA, CALIF.
Foldable beam
[NASA-CASE-LAR-12077-1] c31 N81-25259

ASTRO-SPACE LABS., INC., HUNTSVILLE, ALA.
Linear differential pressure sensor Patent
[NASA-CASE-IXP-01974] c14 N71-22752

ATHENS COLL., ALA.
Apparatus and method for heating a material in a transparent ampoule
[NASA-CASE-MFS-25436-1] c76 N81-30012

ATLANTIC RESEARCH CORP., ALEXANDRIA, VA.
Spherically-shaped rocket motor Patent
[NASA-CASE-IXHQ-01897] c28 N70-35381

AUBURN RESEARCH FOUNDATION, INC., ALA.
Shear modulated fluid amplifier Patent
[NASA-CASE-MFS-10412] c12 N71-17578

Laser coolant and ultraviolet filter
[NASA-CASE-MFS-20180] c16 N72-12440

AUBURN UNIV., ALA.
Automatic frequency control for FM transmitter
[NASA-CASE-MFS-21540-1] c32 N74-19790

Isolated output system for a class D switching-mode amplifier
[NASA-CASE-MFS-21616-1] c33 N75-30429

Frequency modulated oscillator
[NASA-CASE-MFS-23181-1] c33 N77-17351

AUTOMETICS, ANAHEIM, CALIF.
Adaptive voting computer system
[NASA-CASE-MSC-13932-1] c62 N74-14920

AVCO CORP., NEW YORK.
Signal multiplexer

SOURCE

[NASA-CASE-XGS-01110] c07 N69-24334
AVCO CORP., WILMINGTON, MASS.
 Method and apparatus for making a heat
 insulating and ablative structure Patent
 [NASA-CASE-XMS-02009] c33 N71-20834

B

BALDWIN ELECTRONICS, INC., LITTLE ROCK, ARK.
 Digital plus analog output encoder
 [NASA-CASE-GSC-12115-1] c62 N76-31546
BALDWIN-LINNA-HAMILTON CORP., SAN FRANCISCO, CALIF.
 Valve actuator Patent
 [NASA-CASE-XHQ-01208] c15 N70-35409
BALL AEROSPACE SYSTEMS DIV., BOULDER, COLO.
 Microwave switching power divider
 [NASA-CASE-GSC-12420-1] c33 N80-21670
BALL BROS. RESEARCH CORP., BOULDER, COLO.
 Turnstile slot antenna
 [NASA-CASE-GSC-11428-1] c32 N74-20864
 Star scanner
 [NASA-CASE-GSC-11569-1] c89 N74-30886
BARNES ENGINEERING CO., STAMFORD, CONN.
 Multi-lobar scan horizon sensor Patent
 [NASA-CASE-XGS-00809] c21 N70-35427
 Horizon sensor with a plurality of fixedly
 positioned radiation compensated radiation
 sensitive detectors Patent
 [NASA-CASE-XNP-06957] c14 N71-21088
 Miniature carbon dioxide sensor and methods
 [NASA-CASE-MSC-13332-1] c14 N72-21408
 Wedge immersed thermistor bolometers
 [NASA-CASE-XGS-01245-1] c35 N79-33449
BATTELLE COLUMBUS LABS., OHIO.
 Attaching of strain gages to substrates
 [NASA-CASE-FRC-10093-1] c35 N80-20560
BATTELLE MEMORIAL INST., COLUMBUS, OHIO.
 Process for preparation of dianilinosilanes Patent
 [NASA-CASE-XMF-06409] c06 N71-23230
 Process for preparation of high-molecular-
 weight polyaryloxysilanes Patent
 [NASA-CASE-XMF-08674] c06 N71-28807
 Method for determining presence of OH in
 magnesium oxide
 [NASA-CASE-NPO-10774] c06 N72-17095
 Porous electrode comprising a bonded stack of
 pieces of corrugated metal foil
 [NASA-CASE-GSC-11368-1] c09 N73-32108
 Method of making porous conductive supports for
 electrodes
 [NASA-CASE-GSC-11367-1] c44 N74-19692
BATTELLE MEMORIAL INST., RICHLAND, WASH.
 Low temperature aluminum alloy Patent
 [NASA-CASE-XMF-02786] c17 N71-20743
BATTELLE NORTHEAST LABS., RICHLAND, WASH.
 Preparation of high purity copper fluoride
 [NASA-CASE-LBW-10794-1] c06 N72-17093
BAUSCH AND LOMB, INC., ROCHESTER, N. Y.
 Petzval type objective including field shaping
 lens Patent
 [NASA-CASE-GSC-10700] c23 N71-30027
 Illumination system including a virtual light
 source Patent
 [NASA-CASE-HQN-10781] c23 N71-30292
BAYLOR UNIV., HOUSTON, TEX.
 EEG sleep analyzer and method of operation Patent
 [NASA-CASE-MSC-13282-1] c05 N71-24729
 Compressible biomedical electrode
 [NASA-CASE-MSC-13648] c05 N72-27103
BECKMAN INSTRUMENTS, INC., ANAHEIM, CALIF.
 Pressure modulating valve
 [NASA-CASE-MSC-14905-1] c37 N77-28487
BECKMAN INSTRUMENTS, INC., FULLERTON, CALIF.
 Pulse activated polarographic hydrogen detector
 Patent
 [NASA-CASE-XMF-06531] c14 N71-17575
 Electronic divider and multiplier using
 photocells Patent
 [NASA-CASE-XPR-05637] c09 N71-15480
 Pulse generating circuit employing switch means
 on ends of delay line for alternately charging
 and discharging same Patent
 [NASA-CASE-XNP-00745] c10 N71-28960
 Gas operated actuator
 [NASA-CASE-NPO-11340] c15 N72-33477
 Specific wavelength colorimeter
 [NASA-CASE-MSC-14081-1] c35 N74-27860
BECKMAN INSTRUMENTS, INC., SOUTH PASADENA, CALIF.
 Pneumatic system for controlling and actuating

pneumatic cyclic devices
 [NASA-CASE-XMS-04843] c03 N69-21469
BECTON, DICKINSON AND CO., RUTHERFORD, N. J.
 Vacuum probe surface sampler
 [NASA-CASE-LAB-10623-1] c14 N73-30395
BELL AEROSPACE CO., BUFFALO, N. Y.
 Modulator for tone and binary signals
 [NASA-CASE-GSC-11743-1] c32 N75-24981
 Correlation type phase detector
 [NASA-CASE-GSC-11744-1] c33 N75-26243
BELL AEROSYSTEMS CO., BUFFALO, N. Y.
 Lunar landing flight research vehicle Patent
 [NASA-CASE-XPR-00929] c31 N70-34966
 Flexibly connected support and skin Patent
 [NASA-CASE-XLA-01027] c31 N71-24035
 Injection head for delivering liquid fuel and
 oxidizers
 [NASA-CASE-NPO-10046] c28 N72-17843
 Flight control system
 [NASA-CASE-MSC-13397-1] c21 N72-25595
BELL AND HOWELL CO., CHICAGO, ILL.
 Boron trifluoride coatings for thermoplastic
 materials and method of applying same in glow
 discharge
 [NASA-CASE-ARC-11057-1] c27 N78-31233
 Process for producing a well-adhered durable
 optical coating on an optical plastic substrate
 [NASA-CASE-ARC-11039-1] c74 N78-32854
BELLCOIN, INC., WASHINGTON, D. C.
 Physical correction filter for improving the
 optical quality of an image
 [NASA-CASE-HQN-10542-1] c74 N75-25706
BENDIX CORP., ANN ARBOR, MICH.
 Circuit breaker utilizing magnetic latching
 relays Patent
 [NASA-CASE-MSC-11277] c09 N71-29008
BENDIX CORP., COLUMBIA, MD.
 Microwave dichroic plate
 [NASA-CASE-GSC-12171-1] c33 N79-28416
BENDIX CORP., DAVENPORT, IOWA.
 Dual stage check valve
 [NASA-CASE-MSC-13587-1] c15 N73-30459
BENDIX CORP., DETROIT, MICH.
 Deformable vehicle wheel Patent
 [NASA-CASE-MFS-20400] c31 N71-18611
BENDIX CORP., HUNTSVILLE, ALA.
 Multi axes vibration fixtures
 [NASA-CASE-MFS-20242] c14 N73-19421
BENDIX CORP., KENNEDY SPACE CENTER, FLA.
 Color perception tester
 [NASA-CASE-KSC-10278] c05 N72-16015
BENDIX CORP., TETERBORO, N. J.
 Evacuation valve
 [NASA-CASE-LAB-10061-1] c15 N72-31483
BENDIX RESEARCH LABS., SOUTHFIELD, MICH.
 Image tube
 [NASA-CASE-GSC-11602-1] c33 N74-21850
BOEING AEROSPACE CO., HOUSTON, TEX.
 Fluid sample collection and distribution system
 [NASA-CASE-MSC-16841-1] c34 N79-24285
 Method and automated apparatus for detecting
 coliform organisms
 [NASA-CASE-MSC-16777-1] c51 N80-27067
BOEING AEROSPACE CO., SEATTLE, WASH.
 Method and apparatus for fabricating improved
 solar cell modules
 [NASA-CASE-NPO-14416-1] c44 N81-14389
BOEING CO., COCOA BEACH, FLA.
 Positive contact resistance soldering unit
 [NASA-CASE-KSC-10242] c15 N72-23497
 Variable resistance constant tension and
 lubrication device
 [NASA-CASE-KSC-10723-1] c37 N75-13265
BOEING CO., HOUSTON, TEX.
 Method and apparatus for eliminating luminol
 interference material
 [NASA-CASE-MSC-16260-1] c51 N80-16714
BOEING CO., HUNTSVILLE, ALA.
 Hydrogen fire blink detector
 [NASA-CASE-MFS-15063] c14 N72-25412
 Boreoscope with variable angle scope
 [NASA-CASE-MFS-15162] c14 N72-32452
 Guide for a typewriter
 [NASA-CASE-MFS-15218-1] c37 N77-19457
BOEING CO., PASADENA, TEX.
 Medical subject monitoring systems
 [NASA-CASE-MSC-14180-1] c52 N76-14757
BOEING CO., SEATTLE, WASH.
 Strain gage Patent Application

[NASA-CASE-FRC-10053] c14 N70-35587
Method of inhibiting stress corrosion cracks in titanium alloys Patent
[NASA-CASE-NPO-10271] c17 N71-16393
Strain sensor for high temperatures Patent
[NASA-CASE-XNP-09205] c14 N71-17657
Forming tool for ribbon or wire
[NASA-CASE-XLA-05966] c15 N72-12408
Solar cell assembly test method
[NASA-CASE-NPO-10401] c03 N72-2C033
Thermal compression bonding of interconnectors
[NASA-CASE-GSC-10303] c15 N72-22487
Extrusion can
[NASA-CASE-NPO-10812] c15 N73-13464
Radiation sensitive solid state switch
[NASA-CASE-NPO-10817-1] c08 N73-30135
Plasma cleaning device
[NASA-CASE-MFS-22906-1] c75 N78-27913
Calibrating pressure switch
[NASA-CASE-XMF-04494-1] c33 N79-33392
BORING COMMERCIAL AIRPLANE CO., SEATTLE, WASH.
Fuselage structure using advanced technology metal matrix fiber reinforced composites
[NASA-CASE-LAR-11688-1] c05 N78-18045
Improved tire/wheel concept
[NASA-CASE-LAR-11695-2] c37 N80-18402
Tire/wheel concept
[NASA-CASE-LAR-11695-2] c37 N81-24443
BORG-WARNER CORP., CHICAGO, ILL.
Data transfer system Patent
[NASA-CASE-NPO-12107] c08 N71-27255
BROWN AND ROOT-NORTROP, HOUSTON, TEX.
Anti-fog composition
[NASA-CASE-MSC-13530-2] c23 N75-14834
BROWN ENGINEERING CO., INC., HUNTSVILLE, ALA.
Air bearing Patent
[NASA-CASE-XMF-01887] c15 N71-10617
Collapsible nozzle extension for rocket engines Patent
[NASA-CASE-MFS-11497] c28 N71-16224
Inspection gage for boss Patent
[NASA-CASE-XMF-04966] c14 N71-17658
Method of recording a gas flow pattern Patent
[NASA-CASE-XMF-01779] c12 N71-20815
Trigonometric vehicle guidance assembly which aligns the three perpendicular axes of two three-axes systems Patent
[NASA-CASE-XMF-00684] c21 N71-21688
Vapor liquid separator Patent
[NASA-CASE-XMF-04042] c15 N71-23023
Thruster maintenance system Patent
[NASA-CASE-MFS-20325] c28 N71-27095
Inflatable transpiration cooled nozzle
[NASA-CASE-MFS-20619] c28 N72-11708

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CALIFORNIA COMPUTER PRODUCTS, INC., ANAHEIM.
Temperature regulation circuit Patent
[NASA-CASE-XNP-02792] c14 N71-28958
CALIFORNIA INST. OF TECH., PASADENA.
Attitude control for spacecraft Patent
[NASA-CASE-XNP-02982] c31 N70-41855
Baseband signal combiner for large aperture antenna array
[NASA-CASE-NPO-14641-1] c32 N81-29308
Schottky barrier solar cell
[NASA-CASE-NPO-13689-2] c44 N81-29525
Interferometer
[NASA-CASE-NPO-14448-1] c74 N81-29963
CALIFORNIA UNIV., BERKELEY.
Adjustable mount for a trihedral mirror Patent
[NASA-CASE-XNP-08907] c23 N71-25123
Infrared detectors
[NASA-CASE-LAR-10728-1] c14 N73-12445
Resistive anode image converter
[NASA-CASE-HQN-10876-1] c33 N76-27473
Low gravity phase separator
[NASA-CASE-MSC-14773-1] c35 N78-12390
Automatic multiple-sample applicator and electrophoresis apparatus
[NASA-CASE-ARC-10991-1] c25 N78-14104
Process for preparing higher oxides of the alkali and alkaline earth metals
[NASA-CASE-ARC-10992-1] c26 N78-32229
Microelectrophoretic apparatus and process
[NASA-CASE-ARC-11121-1] c25 N79-14169
CALIFORNIA UNIV., LOS ANGELES.
Continuous plasma light source

[NASA-CASE-XNP-04167-2] c25 N72-24753
Continuous plasma laser
[NASA-CASE-XNP-04167-3] c36 N77-19416
CATHOLIC UNIV. OF AMERICA, WASHINGTON, D.C.
Electromagnetic wave energy converter
[NASA-CASE-GSC-11394-1] c09 N73-32109
CHANCE VOUGHT CORP., DALLAS, TEX.
Coupling for linear shaped charge Patent
[NASA-CASE-XLA-00189] c33 N70-36846
Spin forming tubular elbows Patent
[NASA-CASE-XMF-01083] c15 N71-22723
Single action separation mechanism Patent
[NASA-CASE-XLA-00188] c15 N71-22874
CHRYSLER CORP., DETROIT, MICH.
Ceramic insulation for radiant heating environments and method of preparing the same Patent
[NASA-CASE-MFS-14253] c33 N71-24858
Constant temperature heat sink for calorimeters Patent
[NASA-CASE-XMF-04208] c33 N71-29051
CHRYSLER CORP., HUNTSVILLE, ALA.
Apparatus for ejection of an instrument cover
[NASA-CASE-XMF-04132] c15 N69-27502
CLEMSON UNIV., S.C.
Method of forming dynamic membrane on stainless steel support
[NASA-CASE-MSC-18172-1] c26 N80-19237
COLLINS RADIO CO., CEDAR RAPIDS, IOWA.
Power responsive overload sensing circuit Patent
[NASA-CASE-GSC-10667-1] c10 N71-33129
Chassis unit insert tightening-extract device
[NASA-CASE-XMS-01077-1] c37 N79-33467
COLLINS RADIO CO., DALLAS, TEX.
Signal path series step biased multidevice high efficiency amplifier Patent
[NASA-CASE-GSC-10668-1] c07 N71-28430
Heat conductive resiliently compressible structure for space electronics package modules Patent
[NASA-CASE-MSC-12389] c33 N71-29052
Infinite range electronics gain control circuit
[NASA-CASE-GSC-10786-1] c10 N72-28241
COLORADO STATE UNIV., FORT COLLINS.
Apparatus for extraction and separation of a preferentially photo-dissociated molecular isotope into positive and negative ions by means of an electric field
[NASA-CASE-LEW-12465-1] c25 N78-25148
COMPREHENSIVE DESIGNERS, INC., SHERMAN OAKS, CALIF.
Vehicle for use in planetary exploration
[NASA-CASE-NPO-11366] c11 N73-26238
COMPUTER CONTROL CO., INC., FRAMINGHAM, MASS.
Test fixture for pellet-like electrical elements
[NASA-CASE-XNP-06032] c09 N69-21926
Support structure for irradiated elements Patent
[NASA-CASE-XNP-06031] c15 N71-15606
Counter Patent
[NASA-CASE-XNP-06234] c10 N71-27137
COMPUTER SCIENCES CORP., FALLS CHURCH, VA.
Oceanic wave measurement system
[NASA-CASE-MFS-23862-1] c48 N80-18667
CONRAC CORP., PASADENA, CALIF.
Penetrating radiation system for detecting the amount of liquid in a tank Patent
[NASA-CASE-MSC-12280] c27 N71-16348
CORNELL UNIV., ITHACA, N. Y.
Flux sensing device using a tubular core with toroidal gating coil and solenoidal output coil wound thereon Patent
[NASA-CASE-XGS-01881] c09 N70-40123
CRANE CO., BUREAH, CALIF.
Hydraulic transformer Patent
[NASA-CASE-MFS-20830] c15 N71-30028
CURTISS-WRIGHT CORP., WOOD-RIDGE, N.J.
Gas turbine combustion apparatus Patent
[NASA-CASE-XLE-103477-1] c28 N71-20330
CUTLER-HAMMER, INC., MELVILLE, N.Y.
Wideband heterodyne receiver for laser communication system
[NASA-CASE-GSC-12053-1] c32 N77-28346

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DELAWARE UNIV., NEWARK.
High field QDS detector for infrared radiation
[NASA-CASE-LAR-11027-1] c35 N74-18088
DENVER UNIV., COLO.
Metal shearing energy absorber

[NASA-CASE-HQN-10638-1] c15 N73-30460
 DEPARTMENT OF TRANSPORTATION, CAMBRIDGE, MASS.
 Optical noise suppression device and method
 [NASA-CASE-MSC-12640-1] c74 N76-31998
 DORNE AND HARGOLIN, INC., BOHEMIA, N.Y.
 Nose cone mounted heat resistant antenna Patent
 [NASA-CASE-XMS-04312] c07 N71-22984
 DOUGLAS AIRCRAFT CO., INC., SANTA MONICA, CALIF.
 Recoverable single stage spacecraft booster Patent
 [NASA-CASE-XMF-01973] c31 N70-41588
 Switching circuit employing regeneratively
 connected complementary transistors Patent
 [NASA-CASE-YNP-02654] c10 N70-42032
 Split nut separation system Patent
 [NASA-CASE-YNP-06914] c15 N71-21489
 Artificial gravity spin deployment system Patent
 [NASA-CASE-YNP-02595] c31 N71-21881
 Portable superclean air column device Patent
 [NASA-CASE-XMF-03212] c15 N71-22721
 Energy absorption device Patent
 [NASA-CASE-YNP-01848] c15 N71-28959
 Collapsible pistons
 [NASA-CASE-MSC-13789-1] c11 N73-32152
 DUKE UNIV., DURHAM, N. C.
 Regulated dc-to-dc converter for voltage step-up
 or step-down with input-output isolation
 [NASA-CASE-HQN-10792-1] c33 N74-11049
 DUMONT ELECTRON TUBES, CLIFTON, N. J.
 High contrast cathode ray tube
 [NASA-CASE-BRC-10468] c09 N72-20206

E

ECHO SCIENCE CORP., MOUNTAIN VIEW, CALIF.
 Dynamic capacitor having a peripherally driven
 element and system incorporating the same
 [NASA-CASE-YNP-02899-1] c33 N79-21265
 EITEL-MCCULLOUGH, INC., SAN CARLOS, CALIF.
 Method of forming ceramic to metal seal Patent
 [NASA-CASE-YNP-01263-2] c15 N71-26312
 ELECTRAC, INC., ANAHEIM, CALIF.
 Optimum predetection diversity receiving system
 Patent
 [NASA-CASE-IGS-00740] c07 N71-23098
 ELECTRIC STORAGE BATTERY CO., RALEIGH, N.C.
 Electric battery and method for operating same
 Patent
 [NASA-CASE-IGS-01674] c03 N71-29129
 Storage battery comprising negative plates of a
 wedge shaped configuration
 [NASA-CASE-NPO-11806-1] c44 N74-15693
 ELECTRIC STORAGE BATTERY CO., YARDLEY, PA.
 Electric storage battery
 [NASA-CASE-NPO-11021] c03 N72-20032
 ELECTRO-OPTICAL SYSTEMS, INC., PASADENA, CALIF.
 Focussing system for an ion source having
 apertured electrodes Patent
 [NASA-CASE-YNP-03332] c09 N71-10618
 Electrolytically regenerative hydrogen-oxygen
 fuel cell Patent
 [NASA-CASE-XLE-04526] c03 N71-11052
 Method of producing refractory bodies having
 controlled porosity Patent
 [NASA-CASE-LEW-10393-1] c17 N71-15468
 Soil particles separator, collector and viewer
 Patent
 [NASA-CASE-YNP-09770] c15 N71-20440
 Particle detection apparatus including a
 ballistic pendulum Patent
 [NASA-CASE-XMS-04201] c14 N71-22990
 Polarity sensitive circuit Patent
 [NASA-CASE-YNP-00952] c10 N71-23271
 Ion engine casing construction and method of
 making same Patent
 [NASA-CASE-YNP-06942] c28 N71-23293
 Material handling device Patent
 [NASA-CASE-YNP-09770-3] c11 N71-27036
 Screen particle separator
 [NASA-CASE-YNP-09770-2] c15 N72-22483
 ELECTRONIC IMAGE SYSTEMS CORP., CAMBRIDGE, MASS.
 Drying apparatus for photographic sheet material
 [NASA-CASE-GSC-11074-1] c14 N73-28489
 ESSEX CORP., ALEXANDRIA, VA.
 Satellite retrieval system
 [NASA-CASE-MFS-25403-1] c18 N81-24164
 EWHEN KNIGHT CORP., EAST WATICK, MASS.
 Method and means for providing an absolute power
 measurement capability Patent
 [NASA-CASE-BRC-11020] c14 N71-26774

F

FAIRCHILD HILLER CORP., GERMANTOWN, MD.
 Two axis fluxgate magnetometer Patent
 [NASA-CASE-GSC-10441-1] c14 N71-27325
 Space simulation and radiative property testing
 system and method Patent
 [NASA-CASE-MFS-20096] c14 N71-30026
 Thermal control system for a spacecraft modular
 housing
 [NASA-CASE-GSC-11018-1] c31 N73-30829
 FAIRCHILD REPUBLIC CO., FARMINGDALE, N. Y.
 Surface conforming thermal/pressure seal
 [NASA-CASE-MSC-18422-1] c37 N80-14400
 PARADAY LABS., INC., LA JOLLA, CALIF.
 Method for attaching a fused-quartz mirror to a
 conductive metal substrate
 [NASA-CASE-MFS-23405-1] c26 N77-29260
 FEDERAL-MOGUL CORP., LOS ALAMITOS, CALIF.
 Hydraulic casting of liquid polymers Patent
 [NASA-CASE-YNP-07659] c06 N71-22975
 FLORIDA UNIV., GAINESVILLE.
 Safety flywheel
 [NASA-CASE-HQN-10888-1] c44 N79-14527
 FMC CORP., NEW YORK.
 Decomposition unit Patent
 [NASA-CASE-XMS-00583] c28 N70-38504
 FOOTHILL COLLEGE, LOS ALTOS HILLS, CALIF.
 Electrical conductivity cell and method for
 fabricating the same
 [NASA-CASE-ARC-10810-1] c33 N76-19339
 FORD MOTOR CO., DEARBORN, MICH.
 Omnidirectional acceleration device Patent
 [NASA-CASE-HQN-10780] c14 N71-30265

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GARRETT CORP., LOS ANGELES, CALIF.
 Relief valve
 [NASA-CASE-XMS-05894-1] c15 N69-21924
 Portable environmental control system Patent
 [NASA-CASE-XMS-09632-1] c05 N71-11203
 Dual latching solenoid valve Patent
 [NASA-CASE-XMS-05890] c09 N71-23191
 Water management system and an electrolytic cell
 therefor Patent
 [NASA-CASE-MSC-10960-1] c03 N71-24718
 Low cycle fatigue testing machine
 [NASA-CASE-LAR-10270-1] c32 N72-25877
 Process for separation of dissolved hydrogen
 from water by use of palladium and process for
 coating palladium with palladium black
 [NASA-CASE-MSC-13335-1] c06 N72-31140
 Flexible joint for pressurizable garment
 [NASA-CASE-MSC-11072] c54 N74-32546
 Gas compression apparatus
 [NASA-CASE-MSC-14757-1] c35 N78-10428
 Wind tunnel
 [NASA-CASE-LAR-10135-1] c09 N79-21083
 Water separator
 [NASA-CASE-XMS-01295-1] c37 N79-21345
 Combinational logic for generating gate drive
 signals for phase control rectifiers
 [NASA-CASE-MFS-25208-1] c33 N81-27402
 GARRETT CORP., TORRANCE, CALIF.
 Adaptive reference voltage generator for firing
 angle control of line-commutated inverters
 [NASA-CASE-MFS-25215-1] c33 N81-31481
 GCA CORP., BEDFORD, MASS.
 Analytical photoionization mass spectrometer
 with an argon gas filter between the light
 source and monochromator Patent
 [NASA-CASE-LAR-10180-1] c06 N71-13461
 GENERAL DYNAMICS/ASTRONAUTICS, SAN DIEGO, CALIF.
 Determination of spot weld quality Patent
 [NASA-CASE-YNP-02588] c15 N71-18613
 Pressure transducer calibrator Patent
 [NASA-CASE-YNP-01660] c14 N71-23036
 Plating nickel on aluminum castings Patent
 [NASA-CASE-YNP-04148] c17 N71-24830
 GENERAL DYNAMICS/CONVAIR, SAN DIEGO, CALIF.
 Signal generator
 [NASA-CASE-YNP-05612] c09 N69-21468
 Separation nut Patent
 [NASA-CASE-XGS-01971] c15 N71-15922
 Zero gravity separator Patent
 [NASA-CASE-XLE-00586] c15 N71-15968

Catalyst cartridge for carbon dioxide reduction unit [NASA-CASE-LAR-10551-1]	c25 N74-12813	Reaction tester [NASA-CASE-MSC-13604-1]	c05 N73-13114
Heat exchanger [NASA-CASE-MPS-22991-1]	c34 N77-10463	Air conditioned suit [NASA-CASE-LAR-10076-1]	c05 N73-20137
GENERAL DYNAMICS CORP., SAN DIEGO, CALIF.		Compton scatter attenuation gamma ray spectrometer [NASA-CASE-MPS-21441-1]	c14 N73-30392
Light radiation direction indicator with a baffle of two parallel grids [NASA-CASE-MNP-03930]	c14 N69-24331	Inverter ratio failure detector [NASA-CASE-MPO-13160-1]	c35 N74-18090
Method and apparatus for attaching physiological monitoring electrodes Patent [NASA-CASE-XPR-07658-1]	c05 N71-26293	Electrophoretic sample insertion [NASA-CASE-MPS-21395-1]	c25 N74-26948
Driving lamps by induction [NASA-CASE-MPS-21214-1]	c09 N73-30181	Apparatus for conducting flow electrophoresis in the substantial absence of gravity [NASA-CASE-MPS-21394-1]	c34 N74-27744
GENERAL ELECTRIC CO., CINCINNATI, OHIO.		Multiparameter vision testing apparatus [NASA-CASE-MSC-13601-2]	c54 N75-27759
Dual output variable pitch turbofan actuation system [NASA-CASE-LEW-12419-1]	c07 N77-14025	Automatic biowaste sampling [NASA-CASE-MSC-14640-1]	c54 N76-14804
Reverse pitch fan with divided splitter [NASA-CASE-LEW-12760-1]	c07 N77-17059	Solar cell module [NASA-CASE-MPO-14467-1]	c44 N79-31753
Leading edge protection for composite blades [NASA-CASE-LEW-12550-1]	c24 N77-15170	Voltage feed through apparatus having reduced partial discharge [NASA-CASE-GSC-12347-1]	c33 N80-18286
Oil cooling system for a gas turbine engine [NASA-CASE-LEW-12830-1]	c07 N77-13106	GENERAL ELECTRIC CO., PLEASANTON, CALIF.	
Blade retainer assembly [NASA-CASE-LEW-12608-1]	c07 N77-27116	Method of making a cermet Patent [NASA-CASE-LEW-10219-1]	c18 N71-28729
Platform for a swing root turbomachinery blade [NASA-CASE-LEW-12312-1]	c07 N77-32148	GENERAL ELECTRIC CO., SCHENECTADY, N. Y.	
Deformable bearing seat [NASA-CASE-LEW-12527-1]	c37 N77-32500	Superconductive accelerometer Patent [NASA-CASE-MNP-01099]	c14 N71-15969
Bearing seat usable in a gas turbine engine [NASA-CASE-LEW-12477-1]	c37 N77-32501	Remote manipulator system [NASA-CASE-MPS-22022-1]	c37 N76-15460
Oil cooling system for a gas turbine engine [NASA-CASE-LEW-12321-1]	c37 N78-10467	Automatic transponder [NASA-CASE-GSC-12075-1]	c32 N77-31350
Impact absorbing blade mounts for variable pitch blades [NASA-CASE-LEW-12313-1]	c37 N78-10468	Directionally solidified eutectic gamma plus beta nickel-base superalloys [NASA-CASE-LEW-12906-1]	c26 N77-32279
Variable thrust nozzle for quiet turbofan engine and method of operating same [NASA-CASE-LEW-12317-1]	c07 N78-17055	GENERAL ELECTRIC CO., UTICA, N. Y.	
Gas turbine engine with convertible accessories [NASA-CASE-LEW-12390-1]	c07 N78-17056	Method of determining bond quality of power transistors attached to substrates [NASA-CASE-MPS-21931-1]	c37 N75-26372
Variable cycle gas turbine engines [NASA-CASE-LEW-12916-1]	c37 N78-17384	GENERAL MOTORS CORP., DETROIT, MICH.	
Gas turbine engine with recirculating bleed [NASA-CASE-LEW-12452-1]	c07 N78-25089	Hermetic sealed vibration damper Patent [NASA-CASE-MSC-10959]	c15 N71-26243
Redundant disc [NASA-CASE-LEW-12496-1]	c07 N78-33101	GENERAL MOTORS CORP., MILWAUKEE, WIS.	
Fuel delivery system including heat exchanger means [NASA-CASE-LEW-12793-1]	c37 N79-11403	Adjustable tension wire guide Patent [NASA-CASE-XMS-02383]	c15 N71-15918
Integrated gas turbine engine-nacelle [NASA-CASE-LEW-12389-3]	c07 N79-14096	GENERAL MOTORS CORP., SANTA BARBARA, CALIF.	
Variable area exhaust nozzle [NASA-CASE-LEW-12378-1]	c07 N79-14097	Resilient wheel Patent [NASA-CASE-MPS-13929]	c15 N71-27091
Sound-suppressing structure with thermal relief [NASA-CASE-LEW-12658-1]	c71 N79-14871	GENERAL PRECISION, INC., LITTLE FALLS, N.J.	
Method and apparatus for rapid thrust increases in a turbofan engine [NASA-CASE-LEW-12971-1]	c07 N80-18039	Reversible current control apparatus Patent [NASA-CASE-XLA-09371]	c10 N71-18724
Curved centerline air intake for a gas turbine engine [NASA-CASE-LEW-13201-1]	c07 N81-14999	GENERAL PRECISION, INC., SUNNYVALE, CALIF.	
Apparatus for sensor failure detection and correction in a gas turbine engine control system [NASA-CASE-LEW-12907-2]	c07 N81-19115	Broadband video process with very high input impedance [NASA-CASE-MPO-10199]	c09 N72-17156
Integrated control system for a gas turbine engine [NASA-CASE-LEW-12594-2]	c07 N81-15116	GENERAL PRECISION SYSTEMS, INC., LITTLE FALLS, N.J.	
GENERAL ELECTRIC CO., CLEVELAND, OHIO.		Fluidic-thermochromic display device Patent [NASA-CASE-BEC-10031]	c12 N71-18603
Variable mixer propulsion cycle [NASA-CASE-LEW-12917-1]	c07 N78-18067	GENERAL TECHNOLOGIES CORP., RESTON, VA.	
GENERAL ELECTRIC CO., PHILADELPHIA, PA.		Method of making reinforced composite structure [NASA-CASE-LEW-12619-1]	c24 N77-19171
Catalyst for growth of boron carbide single crystal whiskers [NASA-CASE-XHQ-03903]	c15 N69-21922	GEOPHYSICS CORP. OF AMERICA, BEDFORD, MASS.	
Didymium hydrate additive to nickel hydroxide electrodes Patent [NASA-CASE-XGS-03505]	c03 N71-16608	Inflation system for balloon type satellites Patent [NASA-CASE-XGS-03351]	c31 N71-16081
Bismuth-lead coatings for gas bearings used in atmospheric environments and vacuum chambers Patent [NASA-CASE-XGS-02011]	c15 N71-20739	Bakeable McLeod gauge [NASA-CASE-XGS-01293-1]	c35 N79-33450
Automatic control of liquid cooling garment by cutaneous and external auditory meatus temperatures [NASA-CASE-MSC-13917-1]	c05 N72-15098	GEOPHYSICS CORP. OF AMERICA, BOSTON, MASS.	
Method for measuring cutaneous sensory perception [NASA-CASE-MSC-13609-1]	c05 N72-25122	Ionospheric battery Patent [NASA-CASE-XGS-01593]	c03 N70-35408
		GEORGE WASHINGTON UNIV., WASHINGTON, D.C.	
		Bacteria detection instrument and method [NASA-CASE-GSC-11533-1]	c14 N73-13435
		Arterial pulse wave pressure transducer [NASA-CASE-GSC-11531-1]	c52 N74-27566
		GIANNINI SCIENTIFIC CORP., SANTA ANA, CALIF.	
		Electric arc light source having undercut recessed anode [NASA-CASE-ABC-10266-1]	c33 N75-29318
		Combination automatic-starting electrical plasma torch and gas shutoff valve [NASA-CASE-XLE-10717]	c37 N75-29426
		GINER, INC., WALTHAM, MASS.	
		Catalyst surfaces for the chromous/chromic redox couple [NASA-CASE-LEW-13148-1]	c33 N80-20487
		Catalyst surfaces for the chromous/chromic redox couple [NASA-CASE-LEW-13148-2]	c44 N81-29524

GLOBE-UNION, INC., MILWAUKEE, WIS.

Method of coating solar cell with borosilicate glass and resultant product
[NASA-CASE-GSC-11514-1] c03 N72-24037

GOODYEAR AEROSPACE CORP., AKRON, OHIO.

Foldable solar concentrator Patent
[NASA-CASE-XLA-04622] c03 N70-41580
Method of making a filament-wound container Patent
[NASA-CASE-XLE-03803-2] c15 N71-17651

Filament wound container Patent
[NASA-CASE-XLE-03803] c15 N71-23816

Panelized high performance multilayer insulation Patent
[NASA-CASE-MPS-14023] c33 N71-25351

Thermally activated foaming compositions Patent
[NASA-CASE-LAR-10373-1] c18 N71-26155

Compression test assembly
[NASA-CASE-LAR-10440-1] c14 N73-32323

Deployable flexible tunnel
[NASA-CASE-MPS-22636-1] c37 N76-22540

GRACE (W. R.) AND CO., CLARKSVILLE, MD.

Metal containing polymers from cyclic tetrameric phenylphosphonitrimides Patent
[NASA-CASE-HQN-10364] c06 N71-27363

GRUMMAN AIRCRAFT ENGINEERING CORP., BETHPAGE, N. Y.

Sealed cabinetry Patent
[NASA-CASE-MSC-12168-1] c09 N71-18600

Out of tolerance warning alarm system for plurality of monitored circuits Patent
[NASA-CASE-XMS-10984-1] c10 N71-19417

GULF GENERAL ATOMIC, SAN DIEGO, CALIF.

Waveform simulator Patent
[NASA-CASE-NPO-10251] c10 N71-27365

GULTON INDUSTRIES, INC., ALBUQUERQUE, N.MEX.

Analog-to-digital converter
[NASA-CASE-MSC-13110-1] c08 N72-22163

GUSTINCIC (J. J.) CONSULTING ENGINEER, MARINA DEL REY, CALIF.

Microwave limb sounder
[NASA-CASE-NPO-14544-1] c74 N79-34014

H**HAMILTON STANDARD, WINDSOR LOCKS, CONN.**

Venting device for pressurized space suit helmet Patent
[NASA-CASE-XMS-09652-1] c05 N71-26333

Regenerable device for scrubbing breathable air of CO₂ and moisture without special heat exchanger equipment
[NASA-CASE-MSC-14771-1] c54 N77-32722

Cell and method for electrolysis of water and anode
[NASA-CASE-MSC-16394-1] c28 N81-24280

HAMILTON STANDARD DIV., UNITED AIRCRAFT CORP., WINDSOR LOCKS, CONN.

Condensate removal device for heat exchanger
[NASA-CASE-MSC-14143-1] c77 N75-20139

HARRIS CORP., MELBOURNE, FLA.

Adaptive polarization separation
[NASA-CASE-LAR-12196-1] c33 N81-26358

Telescoping columns
[NASA-CASE-LAR-12195-1] c31 N81-27324

HAYES INTERNATIONAL CORP., BIRMINGHAM, ALA.

Space craft soft landing system Patent
[NASA-CASE-XMP-02108] c31 N70-36845

Device for preventing high voltage arcing in electron beam welding Patent
[NASA-CASE-XMP-08522] c15 N71-19486

HAYES INTERNATIONAL CORP., HUNTSVILLE, ALA.

Method and apparatus for cryogenic wire stripping Patent
[NASA-CASE-MPS-10340] c15 N71-17628

Self-balancing strain gage transducer Patent
[NASA-CASE-MPS-12827] c14 N71-17656

Automatic closed circuit television arc guidance control Patent
[NASA-CASE-MPS-13046] c07 N71-19433

HAZLETON LABS., FALLS CHURCH, VA.

Use of the enzyme hexokinase for the reduction of inherent light levels
[NASA-CASE-XGS-05533] c04 N69-27487

Light detection instrument Patent
[NASA-CASE-XGS-05534] c23 N71-16355

Lyophilized reaction mixtures Patent
[NASA-CASE-XGS-05532] c06 N71-17705

Firefly pump-metering system
[NASA-CASE-GSC-10218-1] c15 N72-21465

HERCULES, INC., WILMINGTON, DEL.

Method of repairing discontinuity in fiberglass structures
[NASA-CASE-LAR-10416-1] c24 N74-30001

HOFFMAN ELECTRONICS CORP., EL MONTE, CALIF.

Method for producing a solar cell having an integral protective covering
[NASA-CASE-XGS-04531] c03 N69-24267

HONEYWELL, INC., HOPKINS, MINN.

Frequency control network for a current feedback oscillator Patent
[NASA-CASE-GSC-10041-1] c10 N71-19418

HONEYWELL, INC., MINNEAPOLIS, MINN.

Bus voltage compensation circuit for controlling direct current motor
[NASA-CASE-XMS-04215-1] c09 N69-39987

Apparatus for overcurrent protection of a push-pull amplifier Patent
[NASA-CASE-MSC-12033-1] c09 N71-13531

Static inverter Patent
[NASA-CASE-XGS-05289] c09 N71-19470

High impedance measuring apparatus Patent
[NASA-CASE-XMS-08589-1] c09 N71-20569

Clamping assembly for inertial components Patent
[NASA-CASE-XMS-02184] c15 N71-20813

Piezoelectric pump Patent
[NASA-CASE-XNP-05429] c26 N71-21824

Controllers Patent
[NASA-CASE-XMS-07487] c15 N71-23255

Convoluting device for forming convolutions and the like Patent
[NASA-CASE-XNP-05297] c15 N71-23811

Failure sensing and protection circuit for converter networks Patent
[NASA-CASE-GSC-10114-1] c10 N71-27366

Voice operated controller Patent
[NASA-CASE-XLA-04063] c31 N71-33160

Load current sensor for a series pulse width modulated power supply
[NASA-CASE-GSC-10656-1] c09 N72-25249

Radiant source tracker independent of nonconstant irradiance
[NASA-CASE-NPO-11686] c14 N73-25462

Optical instruments
[NASA-CASE-MSC-14096-1] c74 N74-15095

Method of forming shrink-fit compression seal
[NASA-CASE-LAR-11563-1] c37 N77-23482

HONEYWELL, INC., ST. PETERSBURG, FLA.

Reconfiguring redundancy management
[NASA-CASE-MSC-18498-1] c60 N80-30050

HOUSTON UNIV., TEX.

Analysis of volatile organic compounds
[NASA-CASE-MSC-14428-1] c23 N77-17161

HOWARD UNIV., WASHINGTON, D. C.

Locking mechanism for orthopedic braces
[NASA-CASE-GSC-12082-1] c54 N76-22914

A cervix-to-rectum measuring device in a radiation applicator for use in the treatment of cervical cancer
[NASA-CASE-GSC-12081-2] c52 N77-26796

Locking mechanism for orthopedic braces
[NASA-CASE-GSC-12082-2] c52 N81-25661

HUGHES AIRCRAFT CO., CULVER CITY, CALIF.

Varactor high level mixer
[NASA-CASE-XGS-02171] c09 N69-24324

Thermally operated valve Patent
[NASA-CASE-XLE-00815] c15 N70-35407

Thrust dynamometer Patent
[NASA-CASE-XLE-00702] c14 N70-40203

Solid state chemical source for ammonia beam maser Patent
[NASA-CASE-XGS-01504] c16 N70-41578

Canopus detector including automotive gain control of photomultiplier tube Patent
[NASA-CASE-XNP-03914] c21 N71-10771

Horn feed having overlapping apertures Patent
[NASA-CASE-GSC-10452] c07 N71-12396

Deflective rod switch with elastic support and sealing means Patent
[NASA-CASE-XNP-09808] c09 N71-12518

Guidance and maneuver analyzer Patent
[NASA-CASE-XNP-09572] c14 N71-15621

Method of making screen by casting Patent
[NASA-CASE-XLE-00953] c15 N71-15966

Fluid flow control valve Patent
[NASA-CASE-XLE-00703] c15 N71-15967

Low noise single aperture multimode monopulse antenna feed system Patent
[NASA-CASE-XNP-01735] c07 N71-22750

- Multilayer porous ionizer Patent
[NASA-CASE-XNP-04338] c17 N71-23046
- Construction and method of arranging a plurality of ion engines to form a cluster Patent
[NASA-CASE-XNP-02923] c28 N71-23081
- Method for fiberizing ceramic materials Patent
[NASA-CASE-XNP-00597] c18 N71-23088
- Inorganic thermal control pigment Patent
[NASA-CASE-XNP-02139] c18 N71-24184
- Triaxial antenna Patent
[NASA-CASE-XGS-02290] c07 N71-28809
- Variable frequency oscillator with temperature compensation Patent
[NASA-CASE-XNP-03916] c09 N71-28810
- High efficiency ionizer assembly Patent
[NASA-CASE-XNP-01954] c28 N71-28850
- Apparatus for changing the orientation and velocity of a spinning body traversing a path Patent
[NASA-CASE-HQN-00936] c31 N71-29050
- Fabrication of controlled-porosity metals Patent
[NASA-CASE-XNP-04339] c17 N71-29137
- Ion thruster
[NASA-CASE-LEW-10770-1] c28 N72-22770
- Refractory porcelain enamel passive control coating for high temperature alloys
[NASA-CASE-MFS-22324-1] c27 N75-27160
- HUGHES AIRCRAFT CO., LOS ANGELES, CALIF.**
- Power control circuit
[NASA-CASE-XNP-02713] c10 N69-35888
- Thermal switch Patent
[NASA-CASE-XNP-00463] c33 N70-36847
- Double optic system for ion engine Patent
[NASA-CASE-XNP-02839] c28 N70-41922
- Sample collecting impact bit Patent
[NASA-CASE-XNP-01412] c15 N70-42034
- Bootstrap unloader Patent
[NASA-CASE-XNP-09768] c09 N71-12516
- Difference circuit Patent
[NASA-CASE-XNP-08274] c10 N71-13537
- Gas regulator Patent
[NASA-CASE-NPO-10298] c12 N71-17661
- A dc-coupled noninverting one-shot Patent
[NASA-CASE-XNP-09450] c10 N71-18723
- Phase demodulation system with two phase locked loops Patent
[NASA-CASE-XNP-00777] c10 N71-19469
- High voltage transistor circuit Patent
[NASA-CASE-XNP-06937] c09 N71-19516
- Drift compensation circuit for analog to digital converter Patent
[NASA-CASE-XNP-04780] c08 N71-19687
- System for monitoring the presence of neutrals in a stream of ions Patent
[NASA-CASE-XNP-02592] c24 N71-20518
- Broadband frequency discriminator Patent
[NASA-CASE-NPO-10096] c07 N71-24583
- Flexible, repairable, portable material for electrical connectors Patent
[NASA-CASE-XGS-05180] c18 N71-25881
- Phase multiplying electronic scanning system Patent
[NASA-CASE-NPO-10302] c10 N71-26142
- Narrow bandwidth video Patent
[NASA-CASE-XMS-06740-1] c07 N71-26579
- Solar panel fabrication Patent
[NASA-CASE-XNP-03413] c03 N71-26726
- Method for removing oxygen impurities from cesium Patent
[NASA-CASE-XNP-04262-2] c17 N71-26773
- Virtual wall slot circularly polarized planar array antenna
[NASA-CASE-NPO-10301] c07 N72-11148
- Conical reflector antenna
[NASA-CASE-NPO-10303] c07 N72-22127
- Injector for use in high voltage isolators for liquid feed lines
[NASA-CASE-NPO-11377] c15 N73-27406
- High efficiency multifrequency feed
[NASA-CASE-GSC-11909] c32 N74-26863
- Thiophenyl ether disiloxanes and trisiloxanes useful as lubricant fluids
[NASA-CASE-MFS-22411-1] c37 N74-21058
- Method and apparatus for optically monitoring the angular position of a rotating mirror
[NASA-CASE-GSC-11353-1] c74 N74-21304
- Gregorian all-reflective optical system
[NASA-CASE-GSC-12058-1] c74 N77-26942
- Opto-mechanical subsystem with temperature compensation through isothermal design
[NASA-CASE-GSC-12059-1] c35 N77-27366
- Wide power range microwave feedback controller
[NASA-CASE-GSC-12146-1] c33 N78-32340
- System for synchronizing synthesizers of communication systems
[NASA-CASE-GSC-12148-1] c32 N79-20296
- Pseudonoise code tracking loop
[NASA-CASE-MSC-18035-1] c32 N81-15179
- Apparatus and method for determining the position of a radiant energy source
[NASA-CASE-GSC-12147-1] c32 N81-27341
- HUGHES RESEARCH LABS., MALIBU, CALIF.**
- Thrust dynamometer Patent
[NASA-CASE-XLE-05260] c14 N71-20429
- ITT RESEARCH INST., CHICAGO, ILL.**
- Spectral method for monitoring atmospheric contamination of inert-gas welding shields Patent
[NASA-CASE-XMF-02039] c15 N71-15871
- Lightweight refractory insulation and method of preparing the same Patent
[NASA-CASE-XMF-05279] c18 N71-16124
- Stabilized zinc oxide coating compositions Patent
[NASA-CASE-XMF-07770-2] c18 N71-26772
- Synthesis of zinc titanate pigment and coatings containing the same
[NASA-CASE-MFS-13532] c18 N72-17532
- Junction range finder
[NASA-CASE-KSC-10108] c14 N73-25461
- Method of preparing zinc orthotitanate pigment
[NASA-CASE-MFS-23345-1] c27 N77-30237
- IMAGE INFORMATION, INC., DANBURY, CONN.**
- Recorder/processor apparatus
[NASA-CASE-GSC-11553-1] c35 N74-15831
- INCA ENGINEERING CORP., SAN GABRIEL, CALIF.**
- Apparatus for establishing flow of a fluid mass having a known velocity
[NASA-CASE-MFS-21424-1] c34 N74-27730
- INSTITUTE FOR RESEARCH, INC., HOUSTON, TEX.**
- Method of making a perspiration resistant biopotential electrode
[NASA-CASE-MSC-90153-2] c05 N72-25120
- INSTITUTE OF RESEARCH AND INSTRUMENTATION, HOUSTON, TEX.**
- Pressed disc type sensing electrodes with ion-screening means Patent
[NASA-CASE-XMS-04212-1] c05 N71-12346
- INTERNATIONAL BUSINESS MACHINES CORP., HOPEWELL JUNCTION, N. Y.**
- Growth of silicon carbide crystals on a seed while pulling silicon crystals from a melt
[NASA-CASE-NPO-13969-1] c76 N79-23798
- INTERNATIONAL BUSINESS MACHINES CORP., NEW YORK.**
- Electrical connector pin with wiping action
[NASA-CASE-XNP-04238] c09 N69-39734
- Tool attachment for spreading loose elements away from work Patent
[NASA-CASE-XNP-02107] c15 N71-10809
- Redundant memory organization Patent
[NASA-CASE-GSC-10564] c10 N71-29135
- INTERNATIONAL BUSINESS MACHINES CORP., Poughkeepsie, N.Y.**
- Method of growing a ribbon crystal particularly suited for facilitating automated control of ribbon width
[NASA-CASE-NPO-14295-1] c76 N80-32245
- INTERNATIONAL HARVESTER CO., SAN DIEGO, CALIF.**
- Silicide coatings for refractory metals Patent
[NASA-CASE-XLE-10910] c18 N71-29040
- INTERNATIONAL LATEX CORP., DOVER, DEL.**
- Space suit
[NASA-CASE-MSC-12609-1] c05 N73-32012
- ISONET CORP., PALISADES PARK, N.J.**
- Metabolic rate meter and method
[NASA-CASE-MSC-12239-1] c52 N79-21750
- ITT CORP., BUTLEY, N.J.**
- Time division radio relay synchronizing system using different sync code words for in sync and out of sync conditions Patent
[NASA-CASE-GSC-10373-1] c07 N71-19773
- Tracking receiver Patent
[NASA-CASE-XGS-08679] c10 N71-21473
- Satellite interlace synchronization system
[NASA-CASE-GSC-10390-1] c07 N72-11149

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JAMES AND ASSOCIATES, LANCASTER, CALIF.

A system for providing an integrated display of instantaneous information relative to aircraft attitude, heading, altitude, and horizontal situation

[NASA-CASE-PRC-11005-1] c06 N79-24988

JET PROPULSION LAB., CALIFORNIA INST. OF TECH., PASADENA.

Pressure variable capacitor
[NASA-CASE-XNP-09752] c14 N69-21541

Rock drill for recovering samples
[NASA-CASE-XNP-07478] c14 N69-21923

Data compression system
[NASA-CASE-XNP-09785] c08 N69-21928

Magnetohydrodynamic induction machine
[NASA-CASE-XNP-07481] c25 N69-21929

Electromechanical actuator
[NASA-CASE-XNP-05975] c15 N69-23185

Refrigeration apparatus
[NASA-CASE-NPO-10309] c15 N69-23190

Direct radiation cooling of the collector of linear beam tubes
[NASA-CASE-XNP-09227] c15 N69-24319

Excitation and detection circuitry for a flux responsive magnetic head
[NASA-CASE-XNP-04183] c09 N69-24329

Telemetry word forming unit
[NASA-CASE-XNP-09225] c09 N69-24333

Solid state switch
[NASA-CASE-XNP-09228] c09 N69-27500

Belleville spring assembly with elastic guides
[NASA-CASE-XNP-09452] c15 N69-27504

Trifunctional alcohol
[NASA-CASE-NPO-10714] c06 N69-31244

Plurality of photosensitive cells on a pyramidal base for planetary trackers
[NASA-CASE-XNP-04180] c07 N69-35736

Coating process
[NASA-CASE-XNP-06508] c18 N69-39895

Bi-metallic power controlled actuator
[NASA-CASE-XNP-09776] c09 N69-35929

Piping arrangement through a double chamber structure
[NASA-CASE-XNP-08882] c15 N69-39935

Micropacked column for a chromatographic system
[NASA-CASE-XNP-04816] c06 N69-39936

Temperature sensitive capacitor device
[NASA-CASE-XNP-09750] c14 N69-39937

Thermionic tantalum emitter doped with oxygen
Patent Application
[NASA-CASE-NPO-11138] c03 N70-34646

Data handling system based on source significance, storage availability and data received from the source Patent Application
[NASA-CASE-XNP-04162-1] c08 N70-34675

Electro-optical scanning apparatus Patent Application
[NASA-CASE-NPO-11106] c14 N70-34697

Liquid junction and method of fabricating the same Patent Application
[NASA-CASE-NPO-10682] c15 N70-34699

Helium refining by superfluidity Patent
[NASA-CASE-XNP-00733] c06 N70-34946

Means and methods of depositing thin films on substrates Patent
[NASA-CASE-XNP-00595] c15 N70-34967

Photosensitive device to detect bearing deviation Patent
[NASA-CASE-XNP-00438] c21 N70-35089

Antenna beam-shaping apparatus Patent
[NASA-CASE-XNP-00611] c09 N70-35219

Temperature-compensating means for cavity resonator of amplifier Patent
[NASA-CASE-XNP-00449] c14 N70-35220

Parabolic reflector horn feed with spillover correction Patent
[NASA-CASE-XNP-00540] c09 N70-35382

Means for visually indicating flight paths of vehicles between the Earth, Venus, and Mercury Patent
[NASA-CASE-XNP-00708] c14 N70-35394

Space vehicle attitude control Patent
[NASA-CASE-XNP-00465] c21 N70-35395

Binary to binary-coded-decimal converter Patent
[NASA-CASE-XNP-00432] c08 N70-35423

Cassegrainian antenna subreflector flange for suppressing ground noise Patent
[NASA-CASE-XNP-00683] c09 N70-35425

Ionization vacuum gauge Patent
[NASA-CASE-XNP-00646] c14 N70-35666

Two-fluid magnetohydrodynamic system and method for thermal-electric power conversion Patent
[NASA-CASE-XNP-00644] c03 N70-36803

Mechanical coordinate converter Patent
[NASA-CASE-XNP-00614] c14 N70-36907

High pressure four-way valve Patent
[NASA-CASE-XNP-00214] c15 N70-36908

Liquid rocket system Patent
[NASA-CASE-XNP-00610] c28 N70-36910

Radar ranging receiver Patent
[NASA-CASE-XNP-00748] c07 N70-36911

Attitude control for spacecraft Patent
[NASA-CASE-XNP-00294] c21 N70-36938

Elastic universal joint Patent
[NASA-CASE-XNP-00416] c15 N70-36947

Apparatus and method for control of a solid fueled rocket vehicle Patent
[NASA-CASE-XNP-00217] c28 N70-38181

Expulsion bladder-equipped storage tank structure Patent
[NASA-CASE-XNP-00612] c11 N70-38182

High-voltage cable Patent
[NASA-CASE-XNP-00738] c09 N70-38201

Umbilical separator for rockets Patent
[NASA-CASE-XNP-00425] c11 N70-38202

Multiple Belleville spring assembly Patent
[NASA-CASE-XNP-00840] c15 N70-38225

Ignition system for monopropellant combustion devices Patent
[NASA-CASE-XNP-00249] c28 N70-38249

Pressure regulating system Patent
[NASA-CASE-XNP-00450] c15 N70-38603

Slit regulated gas journal bearing Patent
[NASA-CASE-XNP-00476] c15 N70-38620

Steerable solid propellant rocket motor Patent
[NASA-CASE-XNP-00234] c28 N70-38645

Space simulator Patent
[NASA-CASE-XNP-00459] c11 N70-38675

Ejection unit Patent
[NASA-CASE-XNP-00676] c15 N70-38996

Time-division multiplexer Patent
[NASA-CASE-XNP-00431] c09 N70-38998

Trajectory-correction propulsion system Patent
[NASA-CASE-XNP-01104] c28 N70-39931

Electrically-operated rotary shutter Patent
[NASA-CASE-XNP-00637] c14 N70-40273

Zero gravity starting means for liquid propellant motors Patent
[NASA-CASE-XNP-01390] c28 N70-41275

Parallel motion suspension device Patent
[NASA-CASE-XNP-01567] c15 N70-41310

Ignition means for monopropellant Patent
[NASA-CASE-XNP-00876] c28 N70-41311

Reinforcing means for diaphragms Patent
[NASA-CASE-XNP-01962] c32 N70-41370

High pressure filter Patent
[NASA-CASE-XNP-00732] c28 N70-41447

Phase-locked loop with sideband rejecting properties Patent
[NASA-CASE-XNP-02723] c07 N70-41680

Digital television camera control system Patent
[NASA-CASE-XNP-01472] c14 N70-41807

Antiflutter ball check valve Patent
[NASA-CASE-XNP-01152] c15 N70-41811

Roll attitude star sensor system Patent
[NASA-CASE-XNP-01307] c21 N70-41856

Process for preparing sterile solid propellants Patent
[NASA-CASE-XNP-01749] c27 N70-41897

Solenoid construction Patent
[NASA-CASE-XNP-01951] c09 N70-41929

Closed loop ranging system Patent
[NASA-CASE-XNP-01501] c21 N70-41930

Printed circuit board with bellows rivet connection Patent
[NASA-CASE-XNP-05082] c15 N70-41960

Phase-shift data transmission system having a pseudo-noise SYNC code modulated with the data in a single channel Patent
[NASA-CASE-XNP-00911] c08 N70-41961

Baseline stabilization system for ionization detector Patent
[NASA-CASE-XNP-03128] c10 N70-41991

Single or joint amplitude distribution analyzer Patent
[NASA-CASE-XNP-01383] c09 N71-10659

Dual waveguide mode source having control means for adjusting the relative amplitude of two modes Patent
[NASA-CASE-XNP-03134] c07 N71-10676

Method for determining the state of charge of batteries by the use of tracers Patent
[NASA-CASE-XNP-01464] c03 N71-10728

High pressure regulator valve Patent
[NASA-CASE-XNP-00710] c15 N71-10778

Solar battery with interconnecting means for plural cells Patent
[NASA-CASE-XNP-06506] c03 N71-11050

Sealed battery gas manifold construction Patent
[NASA-CASE-XNP-03378] c03 N71-11051

Solar cell submodule Patent
[NASA-CASE-XNP-05821] c03 N71-11056

Reflectometer for receiver input impedance match measurement Patent
[NASA-CASE-XNP-10843] c07 N71-11267

Means for generating a sync signal in an FM communication system Patent
[NASA-CASE-XNP-10830] c07 N71-11281

Multi-feed cone Cassegrain antenna Patent
[NASA-CASE-NPO-10539] c07 N71-11285

Thermionic diode switch Patent
[NASA-CASE-NPO-10404] c03 N71-12255

Anti-backlash circuit for hydraulic drive system Patent
[NASA-CASE-XNP-01020] c03 N71-12260

Binary number sorter Patent
[NASA-CASE-NPO-10112] c08 N71-12502

Linear three-tap feedback shift register Patent
[NASA-CASE-NPO-10351] c08 N71-12503

Binary sequence detector Patent
[NASA-CASE-XNP-05415] c08 N71-12505

Data compression system with a minimum time delay unit Patent
[NASA-CASE-XNP-08832] c08 N71-12506

Magnetic counter Patent
[NASA-CASE-XNP-08836] c09 N71-12515

Operational integrator Patent
[NASA-CASE-NPO-10230] c09 N71-12520

Starting circuit for vapor lamps and the like Patent
[NASA-CASE-XNP-01058] c09 N71-12540

Matched thermistors for microwave power meters Patent
[NASA-CASE-NPO-10348] c10 N71-12554

Micro current measuring device using plural logarithmic response heated filamentary type diodes Patent
[NASA-CASE-XNP-00384] c09 N71-13530

Automatic thermal switch Patent
[NASA-CASE-XNP-03796] c23 N71-15467

Photoelectric energy spectrometer Patent
[NASA-CASE-XNP-04161] c14 N71-15599

Anti-glare improvement for optical imaging systems Patent
[NASA-CASE-NPO-10337] c14 N71-15604

Fluid flow restrictor Patent
[NASA-CASE-NPO-10117] c15 N71-15608

High temperature lens construction Patent
[NASA-CASE-XNP-04111] c14 N71-15622

Solder flux which leaves corrosion-resistant coating Patent
[NASA-CASE-XNP-03459-2] c18 N71-15688

Intermittent type silica gel adsorption refrigerator Patent
[NASA-CASE-XNP-00920] c15 N71-15906

Dual mode horn antenna Patent
[NASA-CASE-XNP-01057] c07 N71-15907

Means for controlling rupture of shock tube diaphragm Patent
[NASA-CASE-XAC-00731] c11 N71-15960

Insertion loss measuring apparatus having transformer means connected across a pair of bolometers Patent
[NASA-CASE-XNP-01193] c10 N71-16057

Polarimeter for transient measurement Patent
[NASA-CASE-XNP-08883] c23 N71-16101

Flexible composite membrane Patent
[NASA-CASE-XNP-08837] c18 N71-16210

Mount for thermal control system Patent
[NASA-CASE-NPO-10138] c33 N71-16357

Optical characteristics measuring apparatus Patent
[NASA-CASE-XNP-08840] c23 N71-16365

Parallel plate viscometer Patent
[NASA-CASE-XNP-09462] c14 N71-17584

Means and method of measuring viscoelastic strain Patent
[NASA-CASE-XNP-01153] c32 N71-17645

Interferometer direction sensor Patent
[NASA-CASE-NPO-10320] c14 N71-17655

Interferometer servo system Patent
[NASA-CASE-NPO-10300] c14 N71-17662

Electrical spot terminal assembly Patent
[NASA-CASE-NPO-10034] c15 N71-17685

Sealed separable connection Patent
[NASA-CASE-NPO-10064] c15 N71-17693

Incremental motion drive system Patent
[NASA-CASE-XNP-08897] c15 N71-17694

Microbalance including crystal oscillators for measuring contaminants in a gas system Patent
[NASA-CASE-NPO-10144] c14 N71-17701

Apparatus and method for protecting a photographic device Patent
[NASA-CASE-NPO-10174] c14 N71-18465

Banging system Patent
[NASA-CASE-NPO-10066] c09 N71-18598

High impact pressure regulator Patent
[NASA-CASE-NPO-10175] c14 N71-18625

Magnetic core current steering commutator Patent
[NASA-CASE-NPO-10201] c08 N71-18694

Method of using photovoltaic cell using poly-N-vinylcarbazole complex Patent
[NASA-CASE-NPO-10373] c03 N71-18698

A dc-coupled noninverting one-shot Patent
[NASA-CASE-XNP-09450] c10 N71-18723

Automatic fault correction system for parallel signal channels Patent
[NASA-CASE-XNP-03263] c09 N71-18843

Data compression processor Patent
[NASA-CASE-NPO-10068] c08 N71-19288

Tape guidance system and apparatus for the provision thereof Patent
[NASA-CASE-XNP-09453] c08 N71-19420

High voltage transistor circuit Patent
[NASA-CASE-XNP-06937] c09 N71-19516

Solar cell matrix Patent
[NASA-CASE-NPO-10821] c03 N71-19545

Electrical switching device Patent
[NASA-CASE-NPO-10037] c09 N71-19610

Drift compensation circuit for analog to digital converter Patent
[NASA-CASE-XNP-04780] c08 N71-19687

Roll-up solar array Patent
[NASA-CASE-NPO-10188] c03 N71-20273

Method and device for determining battery state of charge Patent
[NASA-CASE-NPO-10194] c03 N71-20407

Soil particles separator, collector and viewer Patent
[NASA-CASE-XNP-09770] c15 N71-20440

Transmission line thermal short Patent
[NASA-CASE-XNP-09775] c09 N71-20445

Synchronous servo loop control system Patent
[NASA-CASE-XNP-03744] c10 N71-20448

Processing for producing a sterilized instrument Patent
[NASA-CASE-XNP-09763] c14 N71-20461

Signal-to-noise ratio estimating by taking ratio of mean and standard deviation of integrated signal samples Patent
[NASA-CASE-XNP-05254] c07 N71-20791

Elimination of frequency shift in a multiplex communication system Patent
[NASA-CASE-XNP-01306] c07 N71-20814

High power-high voltage waterload Patent
[NASA-CASE-XNP-05381] c09 N71-20842

Coaxial cable connector Patent
[NASA-CASE-XNP-04732] c09 N71-20851

Soldering with solder flux which leaves corrosion resistant coating Patent
[NASA-CASE-XNP-03459] c15 N71-21078

Miniature stress transducer Patent
[NASA-CASE-XNP-02983] c14 N71-21091

Holder for crystal resonators Patent
[NASA-CASE-XNP-03637] c15 N71-21311

Correlation function apparatus Patent
[NASA-CASE-XNP-00746] c07 N71-21476

Split nut separation system Patent
[NASA-CASE-XNP-06914] c15 N71-21489

Light position locating system Patent
[NASA-CASE-XNP-01059] c23 N71-21821

Electron bombardment ion engine Patent		Fluid containers and resealable septum therefor Patent	
[NASA-CASE-XNP-04124]	c28 N71-21822	[NASA-CASE-NPO-10123]	c15 N71-24835
Data compressor Patent		Temperature telemetric transmitter Patent	
[NASA-CASE-XNP-04067]	c08 N71-22707	[NASA-CASE-NPO-10649]	c07 N71-24840
Error correcting method and apparatus Patent		Tuning arrangement for an electron discharge device or the like Patent	
[NASA-CASE-XNP-02748]	c08 N71-22749	[NASA-CASE-XNP-09771]	c09 N71-24841
Counter and shift register Patent		Noise limiter Patent	
[NASA-CASE-XNP-01753]	c08 N71-22897	[NASA-CASE-NPO-10169]	c10 N71-24844
Friction measuring apparatus Patent		Noninterruptable digital counting system Patent	
[NASA-CASE-XNP-08680]	c14 N71-22995	[NASA-CASE-XNP-09759]	c08 N71-24891
Hybrid lubrication system and bearing Patent		Drive circuit for minimizing power consumption in inductive load Patent	
[NASA-CASE-XNP-01641]	c15 N71-22997	[NASA-CASE-NPO-10716]	c09 N71-24892
Filler valve Patent		Space simulator Patent	
[NASA-CASE-XNP-01747]	c15 N71-23024	[NASA-CASE-NPO-10141]	c11 N71-24964
Refrigeration apparatus Patent		Process for reducing secondary electron emission Patent	
[NASA-CASE-XNP-08877]	c15 N71-23025	[NASA-CASE-XNP-09469]	c24 N71-25555
Reduced bandwidth video communication system utilizing sampling techniques Patent		Minimal logic block encoder Patent	
[NASA-CASE-XNP-02791]	c07 N71-23026	[NASA-CASE-NPO-10595]	c10 N71-25917
Model launcher for wind tunnels Patent		Novel polycarboxylic prepolymeric materials and polymers thereof Patent	
[NASA-CASE-XNP-03578]	c11 N71-23030	[NASA-CASE-NPO-10596]	c06 N71-25929
Drive circuit utilizing two cores Patent		Current steering switch Patent	
[NASA-CASE-XNP-01318]	c10 N71-23033	[NASA-CASE-XNP-08567]	c09 N71-26000
Solar vane actuator Patent		Dual polarity full wave dc motor drive Patent	
[NASA-CASE-XNP-05535]	c14 N71-23040	[NASA-CASE-XNP-07477]	c09 N71-26092
Time of flight mass spectrometer with feedback means from the detector to the low source and a specific counter Patent		High impact antenna Patent	
[NASA-CASE-XNP-01056]	c14 N71-23041	[NASA-CASE-NPO-10231]	c07 N71-26101
Connector internal force gauge Patent		Video communication system and apparatus Patent	
[NASA-CASE-XNP-03918]	c14 N71-23087	[NASA-CASE-XNP-06611]	c07 N71-26102
Circulator having quarter wavelength resonant post and parametric amplifier circuits utilizing the same Patent		Parallel generation of the check bits of a PN sequence Patent	
[NASA-CASE-XNP-02140]	c09 N71-23097	[NASA-CASE-XNP-04623]	c10 N71-26103
Method of resolving clock synchronization error and means therefor Patent		Phase multiplying electronic scanning system Patent	
[NASA-CASE-XNP-08875]	c10 N71-23099	[NASA-CASE-NPO-10302]	c10 N71-26142
Impact testing machine Patent		Electron beam tube containing a multiple cathode array employing indexing means for cathode substitution Patent	
[NASA-CASE-XNP-04817]	c14 N71-23225	[NASA-CASE-NPO-10625]	c09 N71-26182
Zeta potential flowmeter Patent		Fluid phase analyzer Patent	
[NASA-CASE-XNP-06509]	c14 N71-23226	[NASA-CASE-NPO-10691]	c14 N71-26199
Comparator for the comparison of two binary numbers Patent		Variable frequency nuclear magnetic resonance spectrometer Patent	
[NASA-CASE-XNP-04819]	c08 N71-23295	[NASA-CASE-XNP-09830]	c14 N71-26266
Decontamination of petroleum products Patent		Time synchronization system utilizing moon reflected coded signals Patent	
[NASA-CASE-XNP-03835]	c06 N71-23499	[NASA-CASE-NPO-10143]	c10 N71-26326
Dicyanoacetylene polymers Patent		Broadband stable power multiplier Patent	
[NASA-CASE-XNP-03250]	c06 N71-23500	[NASA-CASE-XNP-10854]	c10 N71-26331
Indexing microwave switch Patent		Cascaded complementary pair broadband transistor amplifiers Patent	
[NASA-CASE-XNP-06507]	c09 N71-23548	[NASA-CASE-NPO-10003]	c10 N71-26415
Millimeter wave radiometer for radio astronomy Patent		Digital memory in which the driving of each word location is controlled by a switch core Patent	
[NASA-CASE-XNP-09832]	c30 N71-23723	[NASA-CASE-XNP-01466]	c10 N71-26434
Radiant energy intensity measurement system Patent		Conically shaped cavity radiometer with a dual purpose cone winding Patent	
[NASA-CASE-XNP-06510]	c14 N71-23797	[NASA-CASE-XNP-09701]	c14 N71-26475
High speed phase detector Patent		Analog signal integration and reconstruction system Patent	
[NASA-CASE-XNP-01306-2]	c09 N71-24596	[NASA-CASE-NPO-10344]	c10 N71-26544
Apparatus for testing polymeric materials Patent		Rapid sync acquisition system Patent	
[NASA-CASE-XNP-05699]	c06 N71-24607	[NASA-CASE-NPO-10214]	c10 N71-26577
Digital synchronizer Patent		Cryogenic cooling system Patent	
[NASA-CASE-NPO-10851]	c07 N71-24613	[NASA-CASE-NPO-10467]	c23 N71-26654
Signal processing apparatus for multiplex transmission Patent		Vacuum evaporator with electromagnetic ion steering Patent	
[NASA-CASE-NPO-10388]	c07 N71-24622	[NASA-CASE-NPO-10331]	c09 N71-26701
Self-testing and repairing computer Patent		Automated fluid chemical analyzer Patent	
[NASA-CASE-NPO-10567]	c08 N71-24633	[NASA-CASE-XNP-09451]	c06 N71-26754
Serial digital decoder Patent		Material handling device Patent	
[NASA-CASE-NPO-10150]	c08 N71-24650	[NASA-CASE-XNP-09770-3]	c11 N71-27036
Detenting servomotor Patent		Pressure seal Patent	
[NASA-CASE-XNP-06936]	c15 N71-24695	[NASA-CASE-NPO-10796]	c15 N71-27068
Reversible motion drive system Patent		Multiducted electromagnetic pump Patent	
[NASA-CASE-NPO-10173]	c15 N71-24696	[NASA-CASE-NPO-10755]	c15 N71-27084
Decoder system Patent		Peak acceleration limiter for vibrational tester Patent	
[NASA-CASE-NPO-10118]	c07 N71-24741	[NASA-CASE-NPO-10556]	c14 N71-27185
Television signal processing system Patent		Thin film capacitive bolometer and temperature sensor Patent	
[NASA-CASE-NPO-10140]	c07 N71-24742	[NASA-CASE-NPO-10607]	c09 N71-27232
Switching circuit Patent		Black body cavity radiometer Patent	
[NASA-CASE-XNP-06505]	c10 N71-24799	[NASA-CASE-NPO-10810]	c14 N71-27323
Magnetic power switch Patent			
[NASA-CASE-NPO-10242]	c09 N71-24803		
Remodulator filter Patent			
[NASA-CASE-NPO-10198]	c09 N71-24806		
Broadband microwave waveguide window Patent			
[NASA-CASE-XNP-08880]	c09 N71-24808		
Cavity radiometer Patent			
[NASA-CASE-XNP-08961]	c14 N71-24809		
High-gain, broadband traveling wave maser Patent			
[NASA-CASE-NPO-10548]	c16 N71-24831		

Video signal enhancement system with dynamic range compression and modulation index expansion Patent			Wide band doubler and sine wave quadrature generator		
[NASA-CASE-NPO-10343]	c07	N71-27341	[NASA-CASE-NPO-11133]	c10	N72-20223
Force-balanced, throttle valve Patent			Signal phase estimator		
[NASA-CASE-NPO-10808]	c15	N71-27432	[NASA-CASE-NPO-11203]	c10	N72-20224
Cavity emitter for thermionic converter Patent			Optimal control system for an electric motor driven vehicle		
[NASA-CASE-NPO-10412]	c09	N71-28421	[NASA-CASE-NPO-11210]	c11	N72-20244
Frictionless universal joint Patent			Impact energy absorbing system utilizing fractureable material		
[NASA-CASE-NPO-10646]	c15	N71-28467	[NASA-CASE-NPO-10671]	c15	N72-20443
Epoxy-aziridine polymer product Patent			Torsional disconnect unit		
[NASA-CASE-NPO-10701]	c06	N71-28620	[NASA-CASE-NPO-10704]	c15	N72-20445
Fluid impervious barrier including liquid metal alloy and method of making same Patent			Solid propellant rocket motor		
[NASA-CASE-NXP-08881]	c17	N71-28747	[NASA-CASE-NXP-03282]	c28	N72-20758
Wind tunnel microphone structure Patent			Shell side liquid metal boiler		
[NASA-CASE-NXP-00250]	c11	N71-28779	[NASA-CASE-NPO-10831]	c33	N72-20915
Trialkyl-dihalotantalum and niobium compounds Patent			Method and apparatus for mapping planets		
[NASA-CASE-NXP-04023]	c06	N71-28808	[NASA-CASE-NPO-11001]	c07	N72-21118
Digital memory sense amplifying means Patent			Current steering commutator		
[NASA-CASE-NXP-01012]	c08	N71-28925	[NASA-CASE-NPO-10743]	c08	N72-21199
Digital filter for reducing sampling jitter in digital control systems Patent			Automated equipotential plotter		
[NASA-CASE-NPO-11088]	c08	N71-29034	[NASA-CASE-NPO-11134]	c09	N72-21246
Method and apparatus for aligning a laser beam projector Patent			Pressure transducer		
[NASA-CASE-NPO-11087]	c23	N71-29125	[NASA-CASE-NPO-10832]	c14	N72-21405
Rotable accurate reflector system for telescopes Patent			Positioning mechanism		
[NASA-CASE-NPO-10468]	c23	N71-33229	[NASA-CASE-NPO-10679]	c15	N72-21462
Encoder/decoder system for a rapidly synchronizable binary code Patent			Solid state matrices		
[NASA-CASE-NPO-10342]	c10	N71-33407	[NASA-CASE-NPO-10591]	c03	N72-22041
High power microwave power divider Patent			Solar cell panels with light transmitting plate		
[NASA-CASE-NPO-11031]	c07	N71-33606	[NASA-CASE-NPO-10747]	c03	N72-22042
A dc servosystem including an ac motor Patent			Data multiplexer using tree switching configuration		
[NASA-CASE-NPO-10700]	c07	N71-33613	[NASA-CASE-NPO-11333]	c08	N72-22162
Solar cell matrix			System for quantizing graphic displays		
[NASA-CASE-NPO-11190]	c03	N71-34044	[NASA-CASE-NPO-10745]	c08	N72-22164
Manually actuated heat pump			Digital function generator		
[NASA-CASE-NPO-10677]	c05	N72-11084	[NASA-CASE-NPO-11104]	c08	N72-22165
Virtual wall slot circularly polarized planar array antenna			Analog-to-digital converter analyzing system		
[NASA-CASE-NPO-10301]	c07	N72-11148	[NASA-CASE-NPO-10560]	c08	N72-22166
System for controlling the operation of a variable signal device			Feedback shift register with states decomposed into cycles of equal length		
[NASA-CASE-NPO-11064]	c07	N72-11150	[NASA-CASE-NPO-11082]	c08	N72-22167
Method and apparatus for data compression by a decreasing slope threshold test			Self-obturing, gas operated launcher		
[NASA-CASE-NPO-10769]	c08	N72-11171	[NASA-CASE-NPO-11013]	c11	N72-22247
Apparatus for remote measurement of displacement of marks on a specimen undergoing a tensile test			Optical binocular scanning apparatus		
[NASA-CASE-NPO-10778]	c14	N72-11364	[NASA-CASE-NPO-11002]	c14	N72-22441
Vibration isolation system using compression springs			Ionene membrane separator		
[NASA-CASE-NPO-11012]	c15	N72-11391	[NASA-CASE-NPO-11091]	c18	N72-22567
Feed system for an ion thruster			Deployable solar cell array		
[NASA-CASE-NPO-10737]	c28	N72-11709	[NASA-CASE-NPO-10883]	c31	N72-22874
Thermostatic actuator			Thermal to electrical power conversion system with solid-state switches with Seebeck effect compensation		
[NASA-CASE-NPO-10637]	c15	N72-12409	[NASA-CASE-NPO-11388]	c03	N72-23048
High voltage transistor amplifier with constant current load			Optical frequency waveguide and transmission system		
[NASA-CASE-NPO-11023]	c09	N72-17155	[NASA-CASE-NQN-10541-3]	c23	N72-23695
Reference voltage switching unit			Bipropellant injector		
[NASA-CASE-NPO-11253]	c09	N72-17157	[NASA-CASE-NXP-09461]	c28	N72-23809
Valving device for automatic refilling in cryogenic liquid systems			Solid propellant rocket motor nozzle		
[NASA-CASE-NPO-11177]	c15	N72-17453	[NASA-CASE-NPO-11458]	c28	N72-23810
Expansible support means			Analysis of hydrogen-deuterium mixtures		
[NASA-CASE-NPO-11059]	c15	N72-17454	[NASA-CASE-NPO-11322]	c06	N72-25146
Breakaway connector			Flexible computer accessed telemetry		
[NASA-CASE-NPO-11140]	c15	N72-17455	[NASA-CASE-NPO-11358]	c07	N72-25172
Modular encoder			Multi-purpose antenna employing dish reflector with plural coaxial horn feeds		
[NASA-CASE-NPO-10629]	c08	N72-18184	[NASA-CASE-NPO-11264]	c07	N72-25174
Transition tracking bit synchronization system			Communications link for computers		
[NASA-CASE-NPO-10844]	c07	N72-20140	[NASA-CASE-NPO-11161]	c08	N72-25207
Data compression system			Method and apparatus for frequency-division multiplex communications by digital phase shift of carrier		
[NASA-CASE-NPO-11243]	c07	N72-20154	[NASA-CASE-NPO-11338]	c08	N72-25208
Digital quasi-exponential function generator			Binary coded sequential acquisition ranging system		
[NASA-CASE-NPO-11130]	c08	N72-20176	[NASA-CASE-NPO-11194]	c08	N72-25209
Method and apparatus for high resolution spectral analysis			MOD 2 sequential function generator for multibit binary sequence		
[NASA-CASE-NPO-10748]	c08	N72-20177	[NASA-CASE-NPO-10636]	c08	N72-25210
Flow rate switch			Digital video display system using cathode ray tube		
[NASA-CASE-NPO-10722]	c09	N72-20199	[NASA-CASE-NPO-11342]	c09	N72-25248
Electrical connector			Inverter oscillator with voltage feedback		
[NASA-CASE-NPO-10694]	c09	N72-20200	[NASA-CASE-NPO-10760]	c09	N72-25254
			Thermal motor		
			[NASA-CASE-NPO-11283]	c09	N72-25260
			Two phase flow system with discrete impinging two-phase jets		

[NASA-CASE-NPO-11556]	c12 N72-25292	Stacked solar cell arrays	
Atmospheric sampling devices		[NASA-CASE-NPO-11771]	c03 N73-20040
[NASA-CASE-NPO-11373]	c13 N72-25323	A m-ary linear feedback shift register with	
Light sensor		binary logic	
[NASA-CASE-NPO-11311]	c14 N72-25414	[NASA-CASE-NPO-11868]	c10 N73-20254
Quick disconnect coupling		Apparatus for recovering matter adhered to a	
[NASA-CASE-NPO-11202]	c15 N72-25450	host surface	
Coaxial injector for reaction motors		[NASA-CASE-NPO-11213]	c15 N73-20514
[NASA-CASE-NPO-11095]	c15 N72-25455	Scan converting video tape recorder	
Ball screw linear actuator		[NASA-CASE-NPO-10166-1]	c07 N73-22076
[NASA-CASE-NPO-11222]	c15 N72-25456	Collapsible structure for an antenna reflector	
Helium refrigerator and method for		[NASA-CASE-NPO-11751]	c07 N73-24176
decontaminating the refrigerator		Pump for delivering heated fluids	
[NASA-CASE-NPO-10634]	c23 N72-25619	[NASA-CASE-NPO-11417]	c15 N73-24513
Uninsulated in-core thermionic diode		Ion thruster with a combination keeper electrode	
[NASA-CASE-NPO-10542]	c09 N72-27228	and electron baffle	
Audio frequency marker system		[NASA-CASE-NPO-11880]	c28 N73-24783
[NASA-CASE-NPO-11147]	c14 N72-27408	Solid propellant rocket motor	
Light direction sensor		[NASA-CASE-NPO-11559]	c28 N73-24784
[NASA-CASE-NPO-11201]	c14 N72-27409	Code regenerative clean-up loop transponder for	
Adjustable support		a mu-type ranging system	
[NASA-CASE-NPO-10721]	c15 N72-27484	[NASA-CASE-NPO-11707]	c07 N73-25161
Method for controlling vapor content of a gas		Numerical computer peripheral interactive device	
[NASA-CASE-NPO-10633]	c03 N72-28025	with manual controls	
Maser for frequencies in the 7-20 GHz range		[NASA-CASE-NPO-11497]	c08 N73-25206
[NASA-CASE-NPO-11437]	c16 N72-28521	Radiant source tracker independent of	
Thin film temperature sensor and method of		nonconstant irradiance	
making same		[NASA-CASE-NPO-11686]	c14 N73-25462
[NASA-CASE-NPO-11775]	c26 N72-26761	Two carrier communication system with single	
Circularly polarized antenna		transmitter	
[NASA-CASE-NPO-10214]	c09 N72-31235	[NASA-CASE-NPO-11548]	c07 N73-26118
Singly-curved reflector for use in high-gain		High pulse rate high resolution optical radar	
antennas		system	
[NASA-CASE-NPO-11361]	c07 N72-32169	[NASA-CASE-NPO-11426]	c07 N73-26119
Digital slope threshold data compressor		Counting digital filters	
[NASA-CASE-NPO-11630]	c08 N72-33172	[NASA-CASE-NPO-11821-1]	c08 N73-26175
Continuously variable voltage controlled phase		Automated attendance accounting system	
shifter		[NASA-CASE-NPO-11456]	c08 N73-26176
[NASA-CASE-NPO-11129]	c09 N72-33204	Low phase noise digital frequency divider	
Pseudonoise sequence generators with three tap		[NASA-CASE-NPO-11569]	c10 N73-26229
linear feedback shift registers		Vehicle for use in planetary exploration	
[NASA-CASE-NPO-11406]	c08 N73-12175	[NASA-CASE-NPO-11366]	c11 N73-26238
Versatile arithmetic unit for high speed		Temperature control system with a pulse width	
sequential decoder		modulated bridge	
[NASA-CASE-NPO-11371]	c08 N73-12177	[NASA-CASE-NPO-11304]	c14 N73-26430
Dual frequency microwave reflex feed		Disconnect unit	
[NASA-CASE-NPO-13091-1]	c09 N73-12214	[NASA-CASE-NPO-11330]	c33 N73-26958
Audio system with means for reducing noise effects		Filter for third order phase locked loops	
[NASA-CASE-NPO-11631]	c10 N73-12244	[NASA-CASE-NPO-11941-1]	c10 N73-27171
Interferometer-polarimeter		Receiver with an improved phase lock loop in a	
[NASA-CASE-NPO-11239]	c14 N73-12446	multichannel telemetry system with suppressed	
Irradiance measuring device		carrier	
[NASA-CASE-NPO-11493]	c14 N73-12447	[NASA-CASE-NPO-11593-1]	c07 N73-28012
Program for computer aided reliability estimation		Analog-to-digital converter	
[NASA-CASE-NPO-13086-1]	c15 N73-12495	[NASA-CASE-NPO-00477]	c08 N73-28045
Apparatus for deriving synchronizing pulses from		Pseudonoise (PN) synchronization of data system	
pulses in a single channel PCM communications		with derivation of clock frequency from	
system		received signal for clocking receiver PN	
[NASA-CASE-NPO-11302-1]	c07 N73-13149	generator	
Rotary vane attenuator wherein rotor has		[NASA-CASE-NPO-03623]	c09 N73-28084
orthogonally disposed resistive and dielectric		Apparatus and method for measuring the Seebeck	
cards		coefficient and resistivity of materials	
[NASA-CASE-NPO-11418-1]	c14 N73-13420	[NASA-CASE-NPO-11749]	c14 N73-28486
Gas flow control device		Dual purpose optical instrument capable of	
[NASA-CASE-NPO-11479]	c15 N73-13462	simultaneously acting as spectrometer and	
Electrolytic gas operated actuator		diffractometer	
[NASA-CASE-NPO-11369]	c15 N73-13467	[NASA-CASE-NPO-05231]	c14 N73-28491
Dual purpose momentum wheels for spacecraft with		Continuous magnetic flux pump	
magnetic recording		[NASA-CASE-NPO-01187]	c15 N73-28516
[NASA-CASE-NPO-11481]	c21 N73-13644	Preparation of alkali metal dispersions	
Multiple reflection conical microwave antenna		[NASA-CASE-NPO-08876]	c17 N73-28573
[NASA-CASE-NPO-11661]	c07 N73-14130	Superconductive magnetic-field-trapping device	
Cyclically operable optical shutter		[NASA-CASE-NPO-01185]	c26 N73-28710
[NASA-CASE-NPO-10758]	c14 N73-14427	Automatic carrier acquisition system	
Heat detection and compositions and devices		[NASA-CASE-NPO-11628-1]	c07 N73-30113
therefor		Ferrofluidic solenoid	
[NASA-CASE-NPO-10764-1]	c14 N73-14428	[NASA-CASE-NPO-11738-1]	c09 N73-30185
Parallel-plate viscometer with double diaphragm		Silent emergency alarm system for schools and	
suspension		the like	
[NASA-CASE-NPO-11387]	c14 N73-14429	[NASA-CASE-NPO-11307-1]	c10 N73-30205
Rotary actuator		RF-source resistance meters	
[NASA-CASE-NPO-10680]	c31 N73-14855	[NASA-CASE-NPO-11291-1]	c14 N73-30388
Magnetically actuated tuning method for Gunn		Event sequence detector	
oscillators		[NASA-CASE-NPO-11703-1]	c10 N73-32144
[NASA-CASE-NPO-12106]	c09 N73-15235	Soil penetrometer	
Multichannel telemetry system		[NASA-CASE-NPO-05530]	c14 N73-32321
[NASA-CASE-NPO-11572]	c07 N73-16121	Quadrupole mass filter with means to generate a	
Data-aided carrier tracking loops		noise spectrum exclusive of the resonant	
[NASA-CASE-NPO-11282]	c10 N73-16205	frequency of the desired ions to deflect	

stable ions
[NASA-CASE-XNP-04231] c14 N73-32325

Magnetic-flux pump
[NASA-CASE-XNP-01188] c15 N73-32361

Burrowing apparatus
[NASA-CASE-XNP-07169] c15 N73-32362

Electrostatically controlled heat shutter
[NASA-CASE-NPO-11942-1] c33 N73-32818

Method and apparatus for a single channel digital communications system
[NASA-CASE-NPO-11302-2] c32 N74-1C132

Controlled oscillator system with a time dependent output frequency
[NASA-CASE-NPO-11962-1] c33 N74-10194

Low loss dichroic plate
[NASA-CASE-NPO-11171-1] c32 N74-11000

Image data rate converter having a drum with a fixed head and a rotatable head
[NASA-CASE-NPO-11659-1] c35 N74-11283

Monitoring atmospheric pollutants with a heterodyne radiometer transmitter-receiver
[NASA-CASE-NPO-11919-1] c35 N74-11284

Digital second-order phase-locked loop
[NASA-CASE-NPO-11905-1] c33 N74-12887

Automatic vehicle location system
[NASA-CASE-NPO-11850-1] c32 N74-12912

Thermomagnetic recording and magneto-optic playback system having constant intensity laser beam control
[NASA-CASE-NPO-11317-2] c36 N74-13205

Use of thin film light detector
[NASA-CASE-NPO-11432-2] c35 N74-15090

Temperature compensated digital inertial sensor
[NASA-CASE-NPO-13044-1] c35 N74-15094

Compact hydrogenator
[NASA-CASE-NPO-11682-1] c35 N74-15127

Short range laser obstacle detector
[NASA-CASE-NPO-11856-1] c36 N74-15145

System for stabilizing cable phase delay utilizing a coaxial cable under pressure
[NASA-CASE-NPO-13138-1] c33 N74-17927

Storage battery comprising negative plates of a wedge shaped configuration
[NASA-CASE-NPO-11806-1] c44 N74-19693

Gated compressor, distortionless signal limiter
[NASA-CASE-NPO-11820-1] c32 N74-19788

Apparatus for scanning the surface of a cylindrical body
[NASA-CASE-NPO-11861-1] c36 N74-20009

Decision feedback loop for tracking a polyphase modulated carrier
[NASA-CASE-NPO-13103-1] c32 N74-20811

Optically actuated two position mechanical mover
[NASA-CASE-NPO-13105-1] c37 N74-21060

Thin film gauge
[NASA-CASE-NPO-10617-1] c35 N74-22095

High isolation RF signal selection switches
[NASA-CASE-NPO-13081-1] c33 N74-22814

Single reflector interference spectrometer and drive system therefor
[NASA-CASE-NPO-11932-1] c35 N74-23040

Scanning nozzle plating system
[NASA-CASE-NPO-11758-1] c31 N74-23065

Rock sampling
[NASA-CASE-XNP-10007-1] c46 N74-23068

Rock sampling
[NASA-CASE-XNP-05755] c46 N74-23069

Miniature multichannel biotelemetry system
[NASA-CASE-NPO-13065-1] c52 N74-26625

Dispensing targets for ion beam particle generators
[NASA-CASE-NPO-13112-1] c73 N74-26767

Optically detonated explosive device
[NASA-CASE-NPO-11743-1] c28 N74-27425

Coherent receiver employing nonlinear coherence detection for carrier tracking
[NASA-CASE-NPO-11921-1] c32 N74-30523

Digital servo control of random sound test excitation
[NASA-CASE-NPO-11623-1] c71 N74-31148

Apparatus for forming drive belts
[NASA-CASE-NPO-13205-1] c31 N74-32917

Tool for use in lifting pin supported objects
[NASA-CASE-NPO-13157-1] c37 N74-32918

Preparing oxidizer coated metal fuel particles
[NASA-CASE-NPO-11975-1] c28 N74-33209

Geneva mechanism
[NASA-CASE-NPO-13281-1] c37 N75-13266

Method of producing a storage bulb for an atomic hydrogen maser
[NASA-CASE-NPO-13050-1] c36 N75-15029

Combined pressure regulator and shutoff valve
[NASA-CASE-NPO-13201-1] c37 N75-15050

Simultaneous acquisition of tracking data from two stations
[NASA-CASE-NPO-13292-1] c32 N75-15854

Shock absorbing mount for electrical components
[NASA-CASE-NPO-13253-1] c37 N75-18573

System for generating timing and control signals
[NASA-CASE-NPO-13125-1] c33 N75-19519

Motor run-up system
[NASA-CASE-NPO-13374-1] c33 N75-19524

Deep trap, laser activated image converting system
[NASA-CASE-NPO-13131-1] c36 N75-19652

Multitarget sequential sputtering apparatus
[NASA-CASE-NPO-13345-1] c37 N75-19684

Wide angle sun sensor
[NASA-CASE-NPO-13327-1] c35 N75-23910

Material suspension within an acoustically excited resonant chamber
[NASA-CASE-NPO-13263-1] c12 N75-24774

Heat operated cryogenic electrical generator
[NASA-CASE-NPO-13303-1] c20 N75-24837

System for interference signal nulling by polarization adjustment
[NASA-CASE-NPO-13140-1] c32 N75-24982

Heat detection and compositions and devices therefor
[NASA-CASE-NPO-10764-2] c35 N75-25122

Servo-controlled intravital microscope system
[NASA-CASE-NPO-13214-1] c35 N75-25123

Vehicle locating system utilizing AM broadcasting station carriers
[NASA-CASE-NPO-13217-1] c32 N75-26194

Asynchronous, multiplexing, single line transmission and recovery data system
[NASA-CASE-NPO-13321-1] c32 N75-26195

Fluorescence detector for monitoring atmospheric pollutants
[NASA-CASE-NPO-13231-1] c45 N75-27585

Cooperative multi-axis sensor for teleoperation of article manipulating apparatus
[NASA-CASE-NPO-13386-1] c54 N75-27758

Heat sterilizable patient ventilator
[NASA-CASE-NPO-13313-1] c54 N75-27761

Refrigerated coaxial coupling
[NASA-CASE-NPO-13504-1] c33 N75-30430

Electric power generation system directory from laser power
[NASA-CASE-NPO-13308-1] c36 N75-30524

Subminiature insertable force transducer
[NASA-CASE-NPO-13423-1] c33 N75-31329

Symmetrical odd-modulus frequency divider
[NASA-CASE-NPO-13426-1] c33 N75-31330

Stored charge transistor
[NASA-CASE-NPO-11156-2] c33 N75-31331

Doped Josephson tunneling junction for use in a sensitive IR detector
[NASA-CASE-NPO-13348-1] c33 N75-31332

Acoustically controlled distributed feedback laser
[NASA-CASE-NPO-13175-1] c36 N75-31427

Inert gas metallic vapor laser
[NASA-CASE-NPO-13449-1] c36 N75-32441

Helium refrigerator
[NASA-CASE-NPO-13435-1] c31 N76-14284

Nonlinear nonsingular feedback shift registers
[NASA-CASE-NPO-13451-1] c33 N76-14373

Strain gage mounting assembly
[NASA-CASE-NPO-13170-1] c35 N76-14430

Forward-scatter polarimeter for determining the gaseous depolarization factor in the presence of polluting polydispersed particles
[NASA-CASE-NPO-13756-1] c35 N76-14434

Thermostatically controlled non-tracking type solar energy concentrator
[NASA-CASE-NPO-13497-1] c44 N76-14602

Multi-computer multiple data path hardware exchange system
[NASA-CASE-NPO-13422-1] c60 N76-14818

Cermet composition and method of fabrication
[NASA-CASE-NPO-13120-1] c27 N76-15311

Dichroic plate
[NASA-CASE-NPO-13506-1] c35 N76-15435

Magnetometer using superconducting rotating body
[NASA-CASE-NPO-13388-1] c35 N76-16390

Scan converting video tape recorder
[NASA-CASE-NPO-10166-2] c35 N76-16391

Hydrogen rich gas generator [NASA-CASE-NPO-13342-1]	c37 N76-16446	coding channel [NASA-CASE-NPO-13545-1]	c32 N77-12240
Automated system for identifying traces of organic chemical compounds in aqueous solutions [NASA-CASE-NPO-13063-1]	c25 N76-18245	Computer interface system [NASA-CASE-NPO-13428-1]	c60 N77-12721
Analog to digital converter [NASA-CASE-NPO-13385-1]	c33 N76-18345	High temperature oxidation resistant cermet compositions [NASA-CASE-NPO-13666-1]	c27 N77-13217
Sampler of gas borne particles [NASA-CASE-NPO-13396-1]	c35 N76-18401	Frequency discriminator and phase detector circuit [NASA-CASE-NPO-11515-1]	c33 N77-13315
Stark-effect modulation of CO2 laser with NH2D [NASA-CASE-NPO-11945-1]	c36 N76-18427	Mass spectrometer with magnetic pole pieces providing the magnetic fields for both the magnetic sector and an ion-type vacuum pump [NASA-CASE-NPO-13663-1]	c35 N77-14406
Diffused waveguiding capillary tube with distributed feedback for a gas laser [NASA-CASE-NPO-13544-1]	c36 N76-18428	Thermocouple installation [NASA-CASE-NPO-13540-1]	c35 N77-14409
System for minimizing internal combustion engine pollution emission [NASA-CASE-NPO-13402-1]	c37 N76-18457	Method and apparatus for background signal reduction in opto-acoustic absorption measurement [NASA-CASE-NPO-13683-1]	c35 N77-14411
Hydrogen-bromine secondary battery [NASA-CASE-NPO-13237-1]	c44 N76-18641	Nuclear thermionic converter [NASA-CASE-NPO-13121-1]	c73 N77-18891
Hydrogen-rich gas generator [NASA-CASE-NPO-13464-1]	c44 N76-18642	Multiple rate digital command detection system with range clean-up capability [NASA-CASE-NPO-13753-1]	c32 N77-20289
Zinc-halide battery with molten electrolyte [NASA-CASE-NPO-11961-1]	c44 N76-18643	Charge storage diode modulators and demodulators [NASA-CASE-NPO-10189-1]	c33 N77-21314
Priority interrupt system [NASA-CASE-NPO-13067-1]	c60 N76-18800	Compact, high intensity arc lamp with internal magnetic field producing means [NASA-CASE-NPO-11510-1]	c33 N77-21315
Miniature muscle displacement transducer [NASA-CASE-NPO-13519-1]	c33 N76-19338	Depressurization of arc lamps [NASA-CASE-NPO-10790-1]	c33 N77-21316
Zero torque gear head wrench [NASA-CASE-NPO-13059-1]	c37 N76-20480	Electromagnetic transducer recording head having a laminated core section and tapered gap [NASA-CASE-NPO-10711-1]	c35 N77-21392
Method and apparatus for measurement of trap density and energy distribution in dielectric films [NASA-CASE-NPO-13443-1]	c76 N76-20994	Cryogenic liquid sensor [NASA-CASE-NPO-10619-1]	c35 N77-21393
Indicator providing continuous indication of the presence of a specific pollutant in air [NASA-CASE-NPO-13474-1]	c45 N76-21742	Uniform variable light source [NASA-CASE-NPO-11429-1]	c74 N77-21941
Shared memory for a fault-tolerant computer [NASA-CASE-NPO-13139-1]	c60 N76-21914	Arc control in compact arc lamps [NASA-CASE-NPO-10870-1]	c33 N77-22386
Wind sensor [NASA-CASE-NPO-13462-1]	c35 N76-24524	Hydraulic drain means for servo-systems [NASA-CASE-NPO-10316-1]	c37 N77-22479
Fiber distributed feedback laser [NASA-CASE-NPO-13531-1]	c36 N76-24553	Automated multi-level vehicle parking system [NASA-CASE-NPO-13058-1]	c37 N77-22480
Method and apparatus for generating coherent radiation in the ultra-violet region and above by use of distributed feedback [NASA-CASE-NPO-13346-1]	c36 N76-29575	Sun direction detection system [NASA-CASE-NPO-13722-1]	c74 N77-22951
Stirling cycle engine and refrigeration systems [NASA-CASE-NPO-13613-1]	c37 N76-29590	Isotope separation using metallic vapor lasers [NASA-CASE-NPO-13550-1]	c36 N77-26477
Hydrogen rich gas generator [NASA-CASE-NPO-13342-2]	c44 N76-29700	Distributed feedback acoustic surface wave oscillator [NASA-CASE-NPO-13673-1]	c71 N77-26919
Solar-powered pump [NASA-CASE-NPO-13567-1]	c44 N76-29701	Penetrometer [NASA-CASE-NPO-11103-1]	c35 N77-27367
Hydrogen rich gas generator [NASA-CASE-NPO-13464-2]	c44 N76-29704	Lightweight reflector assembly [NASA-CASE-NPO-13707-1]	c74 N77-28933
Myocardium wall thickness transducer and measuring method [NASA-CASE-NPO-13644-1]	c52 N76-29895	Aldehyde-containing urea-absorbing polysaccharides [NASA-CASE-NPO-13620-1]	c27 N77-30236
Catheter tip force transducer for cardiovascular research [NASA-CASE-NPO-13643-1]	c52 N76-29896	Phase substitution of spare converter for a failed one of parallel phase staggered converters [NASA-CASE-NPO-13812-1]	c33 N77-30365
Real time analysis of voiced sounds [NASA-CASE-NPO-13465-1]	c32 N76-31372	Oil and fat absorbing polymers [NASA-CASE-NPO-11609-2]	c27 N77-31308
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Reflected-wave maser [NASA-CASE-NPO-13490-1]	c36 N76-31512	Apparatus for photon excited catalysis [NASA-CASE-NPO-13566-1]	c25 N77-32255
Method of making hollow elastomeric bodies [NASA-CASE-NPO-13535-1]	c37 N76-31524	Charge-coupled device data processor for an airborne imaging radar system [NASA-CASE-NPO-13587-1]	c32 N77-32342
Solar cell grid patterns [NASA-CASE-NPO-13087-2]	c44 N76-31666	Direct reading inductance meter [NASA-CASE-NPO-13792-1]	c35 N77-32455
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Annular arc accelerator shock tube [NASA-CASE-NPO-13528-1]	c09 N77-10071	Low to high temperature energy conversion system [NASA-CASE-NPO-13510-1]	c44 N77-32581
Cryostat system for temperatures on the order of 2 deg K or less [NASA-CASE-NPO-13459-1]	c31 N77-10229	Solar energy collection system [NASA-CASE-NPO-13810-1]	c44 N77-32582
The dc-to-dc converters employing staggered-phase power switches with two-loop control [NASA-CASE-NPO-13512-1]	c33 N77-10428	Three-dimensional tracking solar energy concentrator and method for making same [NASA-CASE-NPO-13736-1]	c44 N77-32583
Ion and electron detector for use in an ICR spectrometer [NASA-CASE-NPO-13479-1]	c35 N77-10492	Overload protection system for power inverter [NASA-CASE-NPO-13872-1]	c33 N78-10377
Hydrogen-rich gas generator [NASA-CASE-NPO-13560-1]	c44 N77-10636	Photoelectron spectrometer with means for stabilizing sample surface potential [NASA-CASE-NPO-13772-1]	c35 N78-10429
Space communication system for compressed data with a concatenated Reed-Solomon-Viterbi		Machine for use in monitoring fatigue life for a plurality of elastomeric specimens [NASA-CASE-NPO-13731-1]	c39 N78-10493

Portable linear-focused solar thermal energy collecting system		
[NASA-CASE-NPO-13734-1]	c44	N78-10554
Acoustic energy shaping		
[NASA-CASE-NPO-13802-1]	c71	N78-10837
High voltage, high current Schottky barrier solar cell		
[NASA-CASE-NPO-13482-1]	c44	N78-13526
Durable antistatic coating for polymethylmethacrylate		
[NASA-CASE-NPO-13867-1]	c27	N78-14164
Ultra stable frequency distribution system		
[NASA-CASE-NPO-13836-1]	c32	N78-15323
Selective image area control of X-ray film exposure density		
[NASA-CASE-NPO-13808-1]	c35	N78-15461
Motion restraining device		
[NASA-CASE-NPO-13619-1]	c37	N78-16369
Nuclear alkylated pyridine aldehyde polymers and conductive compositions thereof		
[NASA-CASE-NPO-10557]	c27	N78-17214
Method of adhering bone to a rigid substrate using a graphite fiber reinforced bone cement		
[NASA-CASE-NPO-13764-1]	c27	N78-17215
Purging means and method for Xenon arc lamps		
[NASA-CASE-NPO-11978]	c31	N78-17238
Pressure transducer		
[NASA-CASE-NPO-11150]	c35	N78-17359
Cross correlation anomaly detection system		
[NASA-CASE-NPO-13283]	c38	N78-17395
Automatic visual inspection system for microelectronics		
[NASA-CASE-NPO-13282]	c38	N78-17396
Low cost solar energy collection system		
[NASA-CASE-NPO-13579-1]	c44	N78-17460
Differential optoacoustic absorption detector		
[NASA-CASE-NPO-13759-1]	c74	N78-17867
Clutter free synthetic aperture radar correlator		
[NASA-CASE-NPO-14035-1]	c32	N78-18266
Interferometer mirror tilt correcting system		
[NASA-CASE-NPO-13667-1]	c35	N78-18391
Over-under double-pass interferometer		
[NASA-CASE-NPO-13999-1]	c35	N78-18395
Independent gain and bandwidth control of a traveling wave maser		
[NASA-CASE-NPO-13801-1]	c36	N78-18410
High temperature resistant cermet and ceramic compositions		
[NASA-CASE-NPO-13690-1]	c27	N78-19302
Microwave power converter		
[NASA-CASE-NPO-14068-1]	c44	N78-19609
Underground mineral extraction		
[NASA-CASE-NPO-14140-1]	c31	N78-24387
Thin conformal antenna array for microwave power conversions		
[NASA-CASE-NPO-13886-1]	c32	N78-24391
Multistation refrigeration system		
[NASA-CASE-NPO-13839-1]	c31	N78-25256
Swept group delay measurement		
[NASA-CASE-NPO-13909-1]	c33	N78-25319
Polymeric electrolytic hygrometer		
[NASA-CASE-NPO-13948-1]	c35	N78-25391
Charge transfer reaction laser with preionization means		
[NASA-CASE-NPO-13945-1]	c36	N78-27402
RF beam center location method and apparatus for power transmission system		
[NASA-CASE-NPO-13821-1]	c44	N78-28594
Control for nuclear thermionic power source		
[NASA-CASE-NPO-13114-2]	c73	N78-28913
Magneto-optic detection system with noise cancellation		
[NASA-CASE-NPO-11954-1]	c35	N78-29421
Nitramine propellants		
[NASA-CASE-NPO-14103-1]	c28	N78-31255
Reflex feed system for dual frequency antenna with frequency cutoff means		
[NASA-CASE-NPO-14022-1]	c32	N78-31321
Solar pond		
[NASA-CASE-NPO-13581-2]	c44	N78-31525
Non-tracking solar energy collector system		
[NASA-CASE-NPO-13813-1]	c44	N78-31526
Coal desulfurization process		
[NASA-CASE-NPO-13937-1]	c44	N78-31527
Solid propellant motor		
[NASA-CASE-NPO-11458A]	c20	N78-32179
Thermoplastic rubber comprising ethylene-vinyl acetate copolymer, asphalt and fluxing oil		
[NASA-CASE-NPO-08835-1]	c27	N78-33228
Hydrogen-fueled engine		
[NASA-CASE-NPO-13763-1]	c44	N78-33526
Flural output optometric sample cell and analysis system		
[NASA-CASE-NPO-10233-1]	c74	N78-33913
Portable electrophoresis apparatus using minimum electrolyte		
[NASA-CASE-NPO-13274-1]	c25	N79-10163
Automatic communication signal monitoring system		
[NASA-CASE-NPO-13941-1]	c32	N79-10262
Surface roughness measuring system		
[NASA-CASE-NPO-13862-1]	c35	N79-10391
Vehicular impact absorption system		
[NASA-CASE-NPO-14014-1]	c37	N79-10420
Dual membrane hollow fiber fuel cell and method of operating same		
[NASA-CASE-NPO-13732-1]	c44	N79-10513
Combuster		
[NASA-CASE-NPO-13958-1]	c25	N79-11151
Surfactant-assisted liquefaction of particulate carbonaceous substances		
[NASA-CASE-NPO-13904-1]	c25	N79-11152
Electroexplosive device		
[NASA-CASE-NPO-13858-1]	c28	N79-11231
Space-charge-limited solid-state triode		
[NASA-CASE-NPO-13064-1]	c33	N79-11314
Plasma igniter for internal combustion engine		
[NASA-CASE-NPO-13828-1]	c37	N79-11405
Non-tracking solar energy collector system		
[NASA-CASE-NPO-13817-1]	c44	N79-11471
Method of controlling defect orientation in silicon crystal ribbon growth		
[NASA-CASE-NPO-13918-1]	c76	N79-11920
An improved suspension system for a wheel rolling on a flat track		
[NASA-CASE-NPO-14395-1]	c37	N79-12446
Method and apparatus for measuring minority carrier lifetimes and bulk diffusion length in P-N junction solar cells		
[NASA-CASE-NPO-14100-1]	c44	N79-12541
Automated clinical system for chromosome analysis		
[NASA-CASE-NPO-13913-1]	c52	N79-12694
Conical scan tracking system employing a large antenna		
[NASA-CASE-NPO-14009-1]	c32	N79-13214
Stabilization of He2(a 3 Sigma u+ molecules in liquid helium by optical pumping for vacuum UV laser 6		
[NASA-CASE-NPO-13993-1]	c72	N79-13826
High temperature resistant cermet and ceramic compositions		
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 [NASA-CASE-NPO-15419-1] c44 N81-27599
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 [NASA-CASE-NPO-14554-1] c60 N81-27814
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 [NASA-CASE-NPO-15431-1] c25 N81-29178
 Waveguide cooling system
 [NASA-CASE-NPO-15401-1] c33 N81-29344
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 Coal desulfurization
 [NASA-CASE-NPO-14272-1] c25 N81-33246
 Pressure letdown method and device for coal conversion systems
 [NASA-CASE-NPO-15100-1] c28 N81-33306
 Method and apparatus for producing concentric hollow spheres
 [NASA-CASE-NPO-14596-1] c31 N81-33319
 Push-pull converter with energy saving circuit for protecting switching transistors from peak power stress
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 Optical gyroscope system
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 [NASA-CASE-NPO-15398-1] c35 N81-33449
 Head for high speed spinner having a vacuum chuck
 [NASA-CASE-NPO-15227-1] c37 N81-33482

K

KELSEY-HAYES CO., ROMULUS, MICH.
 Variable thrust ion engine utilizing thermally decomposable solid fuel Patent
 [NASA-CASE-XMF-00923] c28 N70-36802
KELTEC INDUSTRIES, INC., ALEXANDRIA, VA.
 Unfurlable structure including coiled strips thrust launched upon tension release Patent
 [NASA-CASE-HQN-00937] c07 N71-28979
KENTUCKY UNIV., LEXINGTON.
 Apparatus for determining changes in limb volume
 [NASA-CASE-MSC-16759-1] c52 N81-24716
KINELOGIC CORP., PASADENA, CALIF.
 Excitation and detection circuitry for a flux responsive magnetic head
 [NASA-CASE-XNP-04183] c09 N69-24329
 Tape guidance system and apparatus for the provision thereof Patent
 [NASA-CASE-XNP-09453] c08 N71-19420
 Incremental tape recorder and data rate converter Patent
 [NASA-CASE-XNP-02778] c08 N71-22710
KOLLSMAN INSTRUMENT CORP., ELMBURST, N. Y.
 Wide angle long eye relief eyepiece Patent
 [NASA-CASE-IMS-06056-1] c23 N71-24857
KOLLSMAN INSTRUMENT CORP., SYOSSET, N. Y.
 Digital modulator and demodulator Patent
 [NASA-CASE-ERC-10041] c08 N71-29138
 Ritchey-Chretien Telescope
 [NASA-CASE-GSC-11487-1] c14 N73-30393
KONIGSBERG INSTRUMENTS, INC., PASADENA, CALIF.
 Accelerometer telemetry system
 [NASA-CASE-ARC-10849-1] c17 N76-29347
KORAD CORP., NEW YORK.
 Laser apparatus for removing material from rotating objects Patent
 [NASA-CASE-MFS-11279] c16 N71-20400

L

LIFE SYSTEMS, INC., BEACHWOOD, OHIO.
 Iodine generator for reclaimed water purification
 [NASA-CASE-MSC-14632-1] c54 N78-14784

LING-TENCO-VOUGHT, INC., DALLAS, TEX.
 Latch/ejector unit Patent
 [NASA-CASE-XLA-03538] c15 N71-24897
LITTLE (ARTHUR D.), INC., CAMBRIDGE, MASS.
 Apparatus for measuring thermal conductivity Patent
 [NASA-CASE-XGS-01052] c14 N71-15992
 Non-flammable elastomeric fiber from a fluorinated elastomer and containing an halogenated flame retardant
 [NASA-CASE-MSC-14331-1] c27 N76-24405
 Flame retardant spandex type polyurethanes
 [NASA-CASE-MSC-14331-2] c27 N78-17213
 Process for spinning flame retardant elastomeric compositions
 [NASA-CASE-MSC-14331-3] c27 N78-32262
 Heat sealable, flame and abrasion resistant coated fabric
 [NASA-CASE-MSC-18382-1] c27 N80-24440
LITTON INDUSTRIES, BEVERLY HILLS, CALIF.
 Life support system
 [NASA-CASE-MSC-12411-1] c05 N72-20096
LITTON INDUSTRIES, COLLEGE PARK, MD.
 Shrink-fit gas valve Patent
 [NASA-CASE-XGS-00587] c15 N70-35087
LITTON INDUSTRIES, SAN CARLOS, CALIF.
 Very high intensity light source using a cathode ray tube
 [NASA-CASE-XNP-01296] c33 N75-27250
LITTON SYSTEMS, INC., MINNEAPOLIS, MINN.
 Apparatus for sampling particulates in gases
 [NASA-CASE-HQN-10037-1] c14 N73-27376
LOCKHEED AIRCRAFT CORP., BURBANK, CALIF.
 Aerodynamic protection for space flight vehicles Patent
 [NASA-CASE-XNP-02507] c31 N71-17679
LOCKHEED-CALIFORNIA CO., BURBANK.
 Absorptive splitter for closely spaced supersonic engine air inlets Patent
 [NASA-CASE-XLA-02865] c28 N71-15563
 Multistage aerospace craft
 [NASA-CASE-XMF-02263] c05 N74-10907
LOCKHEED ELECTRONICS CO., HOUSTON, TEX.
 Television signal scan rate conversion system Patent
 [NASA-CASE-XMS-07168] c07 N71-11300
 Burst synchronization detection system Patent
 [NASA-CASE-XMS-05605-1] c10 N71-19468
 Automatic signal range selector for metering devices Patent
 [NASA-CASE-XMS-06497] c14 N71-26244
 Monostable multivibrator with complementary NOR gates Patent
 [NASA-CASE-MSC-13492-1] c10 N71-28860
 Ultraportable calibrated light source
 [NASA-CASE-MSC-12293-1] c14 N72-27411
 Data storage, image tube type
 [NASA-CASE-MSC-14053-1] c60 N74-12888
 Differential phase shift keyed communication system
 [NASA-CASE-MSC-14065-1] c32 N74-26654
 Differential phase shift keyed signal resolver
 [NASA-CASE-MSC-14066-1] c33 N74-27705
 Method and apparatus for decoding compatible convolutional codes
 [NASA-CASE-MSC-14070-1] c32 N74-32598
 Pulse stretcher for narrow pulses
 [NASA-CASE-MSC-14130-1] c33 N74-32711
 Peak holding circuit for extremely narrow pulses
 [NASA-CASE-MSC-14129-1] c33 N75-18479
 Random pulse generator
 [NASA-CASE-MSC-14131-1] c33 N75-19515
 Digital transmitter for data bus communications system
 [NASA-CASE-MSC-14558-1] c32 N75-21486
 Low distortion receiver for bi-level baseband PCM waveforms
 [NASA-CASE-MSC-14557-1] c32 N76-16249
 System for producing chroma signals
 [NASA-CASE-MSC-14683-1] c74 N77-18893
 Secure communication system
 [NASA-CASE-MSC-16462-1] c32 N78-25274
 Phased array antenna control
 [NASA-CASE-MSC-14939-1] c32 N79-11264
 Apparatus and method for stabilized phase detection for binary signal tracking loops
 [NASA-CASE-MSC-16461-1] c33 N79-11313
 Multiple band circularly polarized microstrip antenna

[NASA-CASE-MSC-18334-1] c32 N80-32604
 Multispectral scanner optical system
 [NASA-CASE-MSC-18255-1] c74 N80-33210
LOCKHEED MISSILES AND SPACE CO., SUNNYVALE, CALIF.
 Device for handling heavy loads
 [NASA-CASE-XNP-04969] c11 N69-27466
 Transient heat transfer gauge Patent
 [NASA-CASE-XNP-09802] c33 N71-15641
 Dual solid cryogenics for spacecraft refrigeration
 Patent
 [NASA-CASE-GSC-10188-1] c23 N71-24725
 Apparatus for detecting the amount of material
 in a resonant cavity container Patent
 [NASA-CASE-XNP-02500] c18 N71-27397
 Emergency earth orbital escape device
 [NASA-CASE-MSC-13281] c31 N72-18859
 Solar energy powered heliotrope
 [NASA-CASE-GSC-10945-1] c21 N72-31637
 Coaxial inverted geometry transistor having
 buried emitter
 [NASA-CASE-ABC-10330-1] c09 N73-32112
 Whole body measurement systems
 [NASA-CASE-MSC-13972-1] c52 N74-10975
 Four phase logic systems
 [NASA-CASE-MSC-14240-1] c33 N75-14957
 Strain arrestor plate for fused silica tile
 [NASA-CASE-MSC-14182-1] c27 N76-14264
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 substantially transparent construction
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 Method of fluxless brazing and diffusion bonding
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M

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 Stretcher Patent
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MARLB-ROCKWELL CORP., JAMESTOWN, N. Y.
 Drilled ball bearing with a one piece
 anti-tipping cage assembly
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 [NASA-CASE-NPO-10431] c15 N71-29132
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 Method and apparatus for tensile testing of
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 [NASA-CASE-LAR-10208-1] c35 N76-18400
 Pulse transducer with artifact signal attenuator
 [NASA-CASE-PRC-11012-1] c52 N80-23969
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 [NASA-CASE-XMP-01174] c02 N70-41589
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 [NASA-CASE-IKS-02342] c05 N71-11199
MARTIN MARIETTA CORP., DENVER, COLO.
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 Derivation of a tangent function using an
 integrated circuit four-quadrant multiplier

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 [NASA-CASE-MSC-16433-1] c52 N78-27750
 Positive isolation disconnect
 [NASA-CASE-MSC-16043-1] c37 N79-11402
 Urine collection device
 [NASA-CASE-MSC-16433-1] c52 N81-24711
MARYLAND UNIV., COLLEGE PARK.
 Method and apparatus for optical modulating a
 light signal Patent
 [NASA-CASE-GSC-10216-1] c23 N71-26722
MASSACHUSETTS INST. OF TECH., CAMBRIDGE.
 Pretreatment method for anti-wettable materials
 [NASA-CASE-XMS-03537] c15 N69-21471
 Hydraulic drive mechanism Patent
 [NASA-CASE-XMS-03252] c15 N71-10658
 Electronic amplifier with power supply switching
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 Laser machining apparatus Patent
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 [NASA-CASE-HQN-10541-4] c16 N71-27183
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 [NASA-CASE-HQN-10541-3] c23 N72-23695
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MCDONNELL AIRCRAFT CO., ST. LOUIS, MO.
 Method for making a heat insulating and ablative
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 [NASA-CASE-XMS-01108] c15 N69-24322
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 corrosive, noxious and other fluids Patent
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 Multiple circuit protector device
 [NASA-CASE-XMS-02744] c33 N75-27249
 Apparatus for welding sheet material
 [NASA-CASE-XMS-01330] c37 N75-27376
 Fused switch
 [NASA-CASE-XMS-01244-1] c33 N79-33393
 Cooling system for high speed aircraft
 [NASA-CASE-LAR-12406-1] c05 N81-26114
**MCDONNELL-DOUGLAS ASTRONAUTICS CO., HUNTINGTON
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 Heat transfer device
 [NASA-CASE-MPS-22938-1] c34 N76-18374

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New polymers of perfluorobutadiene and method of manufacture Patent application
[NASA-CASE-NPO-10863] c06 N70-11251
Method of polymerizing perfluorobutadiene Patent application
[NASA-CASE-NPO-10447] c06 N70-11252

MCDONNELL-DOUGLAS ASTRONAUTICS CO., ST. LOUIS, MO.

Passive propellant system
[NASA-CASE-NPS-23642-2] c20 N78-27176

MCDONNELL-DOUGLAS CORP., HUNTINGTON BEACH, CALIF.

Variable direction force coupler
[NASA-CASE-NPS-20317] c15 N73-13463
Potable water dispenser
[NASA-CASE-NPS-21115-1] c54 N74-12779
Metering gun for dispensing precisely measured charges of fluid
[NASA-CASE-NPS-21163-1] c54 N74-17853

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[NASA-CASE-NPS-20922-1] c18 N74-22136

Device for monitoring a change in mass in varying gravimetric environments
[NASA-CASE-NPS-21556-1] c35 N74-26945

Thrust-isolating mounting
[NASA-CASE-NPS-21680-1] c18 N74-27397

Device for measuring tensile forces
[NASA-CASE-NPS-21728-1] c35 N74-27865

Flame detector operable in presence of proton radiation
[NASA-CASE-NPS-21577-1] c19 N74-29410

Phase-locked servo system
[NASA-CASE-NPS-22073-1] c33 N75-13139

Vacuum leak detector
[NASA-CASE-LAR-11237-1] c35 N75-19612

Meter for use in detecting tension in straps having predetermined elastic characteristics
[NASA-CASE-NPS-22189-1] c35 N75-19615

Latching device
[NASA-CASE-NPS-21606-1] c37 N75-15685

Device for use in loading tension members
[NASA-CASE-NPS-21488-1] c14 N75-24794

MCDONNELL-DOUGLAS CORP., LONG BEACH, CALIF.

Compression test fixture
[NASA-CASE-MSC-18723-1] c39 N81-24470

MCDONNELL-DOUGLAS CORP., NEWPORT BEACH, CALIF.

Method of making membranes
[NASA-CASE-XNP-04264] c03 N69-21337

MCDONNELL-DOUGLAS CORP., SANTA MONICA, CALIF.

Rocket nozzle test method Patent
[NASA-CASE-NPO-10311] c31 N71-15643

Reaction of fluorine with polyperfluoropolyenes
[NASA-CASE-NPO-10862] c06 N72-22107

Polymers of perfluorobutadiene and method of manufacture
[NASA-CASE-NPO-10863-2] c06 N72-25152

Electrolytic cell structure
[NASA-CASE-LAR-11042-1] c33 N75-27252

Prevention of hydrogen embrittlement of high strength steel by hydrazine compositions
[NASA-CASE-NPO-12122-1] c24 N76-14203

Utilization of oxygen difluoride for syntheses of fluoropolymers
[NASA-CASE-NPO-12061-1] c27 N76-16228

MCDONNELL-DOUGLAS CORP., ST. LOUIS, MO.

Thermally conductive polymers
[NASA-CASE-GSC-11304-1] c06 N72-21105

Passive propellant system
[NASA-CASE-NPS-23642-1] c20 N80-10278

MEDICAL SCIENCES RESEARCH FOUNDATION, SAN FRANCISCO, CALIF.

Reduction of blood serum cholesterol
[NASA-CASE-NPO-12119-1] c52 N75-15270

MELLOW INST., PITTSBURGH, PA.

Instrument for measuring torsional creep and recovery Patent
[NASA-CASE-XLE-01481] c14 N71-10781

MELPAR, INC., FALLS CHURCH, VA.

Television simulation for aircraft and space flight Patent
[NASA-CASE-XPR-03107] c09 N71-19449

Compact solar still Patent
[NASA-CASE-XNS-04533] c15 N71-23086

METCOB, INC., SALEM, MASS.

Tuning arrangement for an electron discharge device or the like Patent
[NASA-CASE-XNP-09771] c09 N71-24841

METHODIST HOSPITAL, HOUSTON, TEX.

Snap-in compressible biomedical electrode

[NASA-CASE-MSC-14623-1] c52 N77-28717

MICROWAVE ELECTRONICS CORP., PALO ALTO, CALIF.

Folded traveling wave maser structure Patent
[NASA-CASE-XNP-05219] c16 N71-15550

Superconducting magnet Patent
[NASA-CASE-XNP-06503] c23 N71-29049

MICROWAVE RESEARCH CORP., NORTH ANDOVER, MASS.

Highly efficient antenna system using a corrugated horn and scanning hyperbolic reflector
[NASA-CASE-NPO-13568-1] c32 N76-21365

Multifrequency broadband polarized horn antenna
[NASA-CASE-NPO-14588-1] c32 N81-25278

MIDWEST RESEARCH INST., KANSAS CITY, MO.

Preparation of ordered polyarylenesiloxane/polymers
[NASA-CASE-XNP-10753] c06 N71-11237

Inorganic solid film lubricants Patent
[NASA-CASE-XNP-03988] c15 N71-21403

Fluorinated esters of polycarboxylic acids
[NASA-CASE-NPS-21040-1] c06 N73-30098

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Film feed camera having a detent means Patent
[NASA-CASE-LAR-10686] c14 N71-28935

MINNEAPOLIS-HONEYWELL REGULATOR CO., MINN.

Microelectronic module package Patent
[NASA-CASE-XMS-02182] c10 N71-28783

MISSISSIPPI METHODIST REHABILITATION CENTER, JACKSON.

Universal connectors for joining stringers
[NASA-CASE-LAR-12744-1] c37 N81-31551

MODERN MACHINE AND TOOL CO., NEWPORT NEWS, VA.

Means for accommodating large overstrain in lead wires
[NASA-CASE-LAR-10168-1] c33 N74-22865

MONSANTO CO., ST. LOUIS, MO.

Method for the preparation of inorganic single crystal and polycrystalline electronic materials
[NASA-CASE-XLE-02545-1] c76 N79-21910

MONSANTO RESEARCH CORP., DAYTON, OHIO.

Perfluoro alkylene dioxy-bis-(4-phthalic anhydrides and oxy-bis-(perfluoroalkyleneoxyphthalic anhydrides
[NASA-CASE-NPS-22356-1] c23 N75-30256

Polyimides of ether-linked aryl tetracarboxylic dianhydrides
[NASA-CASE-NPS-22355-1] c23 N76-15268

MOTOROLA, INC., PHOENIX, ARIZ.

Automatic frequency discriminators and control for a phase-lock loop providing frequency preset capabilities Patent
[NASA-CASE-XNP-08665] c10 N71-19467

Method of purifying metallurgical grade silicon employing reduced pressure atmospheric control
[NASA-CASE-NPO-14474-1] c26 N80-14229

Quartz ball valve
[NASA-CASE-NPO-14473-1] c37 N80-23654

Method and apparatus for quadriphase-shift-key and linear phase modulation
[NASA-CASE-NPO-14444-1] c33 N81-15192

PN lock indicator for dithered PN code tracking loop
[NASA-CASE-NPO-14435-1] c33 N81-33405

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[NASA-CASE-MSC-12168-1] c09 N71-18600

Digital frequency discriminator Patent
[NASA-CASE-NPS-14322] c08 N71-18692

Phase modulator Patent
[NASA-CASE-MSC-13201-1] c07 N71-28429

Capacitance multiplier and filter synthesizing network
[NASA-CASE-NPO-11948-1] c33 N74-32712

Quadrature demodulation
[NASA-CASE-GSC-12137-1] c33 N78-32338

N**NATIONAL ACADEMY OF SCIENCES - NATIONAL RESEARCH COUNCIL, ARLINGTON, VA.**

An improved synthesis of 2, 4, 8, 10-tetroxaspiro (5,5) undecane
[NASA-CASE-ABC-11243-1] c27 N79-30375

Improved synthesis of polyformals
[NASA-CASE-ABC-11244-1] c27 N79-30376

NATIONAL ACADEMY OF SCIENCES - NATIONAL RESEARCH COUNCIL, WASHINGTON, D. C.

Gyrator employing field effect transistors
[NASA-CASE-NPS-21433] c09 N73-20232

Suppression of flutter
 [NASA-CASE-LAR-10682-1] c02 N73-26004
 Optical data processing using paraboloidal mirror segments
 [NASA-CASE-GSC-11296-1] c23 N73-30666
 Power supply for carbon dioxide lasers
 [NASA-CASE-GSC-11222-1] c16 N73-32391
 High field Cds detector for infrared radiation
 [NASA-CASE-LAR-11027-1] c35 N74-18088
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 Stagnation pressure probe
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 [NASA-CASE-MFS-22145-2] c75 N76-17951
 Charge injection method and apparatus of producing large area electrets
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 Readout electrode assembly for measuring biological impedance
 [NASA-CASE-ARC-10816-1] c35 N76-24525
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 [NASA-CASE-ARC-10900-1] c35 N77-24454
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 [NASA-CASE-GSC-11571-1] c36 N77-25499
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 Method and apparatus for splitting a beam of energy
 [NASA-CASE-GSC-12083-1] c73 N78-32848
 Cantilever mounted resilient pad gas bearing
 [NASA-CASE-LEW-12569-1] c37 N79-10418
 Massively parallel processor computer
 [NASA-CASE-GSC-12223-1] c60 N79-27864
 Shock isolator for operating a diode laser on a closed-cycle refrigerator
 [NASA-CASE-GSC-12297-1] c37 N79-28549
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 [NASA-CASE-ARC-11243-2] c23 N80-31472
 Pocket ECG electrode
 [NASA-CASE-ARC-11258-1] c52 N80-33081
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 [NASA-CASE-ARC-11117-1] c52 N81-14612
 Microwave integrated circuit for Josephson voltage standards
 [NASA-CASE-MFS-23845-1] c33 N81-17348
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 [NASA-CASE-ARC-11257-1] c04 N81-21047
 Phosphorus-containing bisimide resins
 [NASA-CASE-ARC-11321-1] c27 N81-27272
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 Optical spin compensator
 [NASA-CASE-XGS-02401] c14 N69-27485
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 [NASA-CASE-ERC-10307] c08 N72-21198
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 [NASA-CASE-ERC-10174] c14 N72-25409
 Ultraviolet atomic emission detector
 [NASA-CASE-HQN-10756-1] c14 N72-25428
 Optical pump and driver system for lasers
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 [NASA-CASE-ERC-10081] c14 N72-28437
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 [NASA-CASE-ERC-10392] c21 N73-14692
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 [NASA-CASE-ERC-10226-1] c14 N73-16483
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 [NASA-CASE-ERC-10439] c02 N73-19004
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 [NASA-CASE-ERC-10350] c14 N73-20474
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 [NASA-CASE-ERC-10276] c14 N73-26432
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 [NASA-CASE-HQN-10740-1] c72 N74-19310
 Auditory display for the blind
 [NASA-CASE-HQN-10832-1] c71 N74-21014
 Laser system with an antiresonant optical ring
 [NASA-CASE-HQN-10844-1] c36 N75-19653
 Physical correction filter for improving the optical quality of an image
 [NASA-CASE-HQN-10542-1] c74 N75-25706
 Folding structure fabricated of rigid panels
 [NASA-CASE-XHQ-02146] c18 N75-27040
 Traveling wave solid state amplifier utilizing a semiconductor with negative differential mobility
 [NASA-CASE-HQN-10069] c33 N75-27251
 Vapor deposition apparatus
 [NASA-CASE-HQN-10462] c25 N75-29192
 Resistive anode image converter
 [NASA-CASE-HQN-10876-1] c33 N76-27473
 Rechargeable battery which combats shape change of the zinc anode
 [NASA-CASE-HQN-10862-1] c44 N76-29699
 System and method for tracking a signal source
 [NASA-CASE-HQN-10880-1] c17 N78-17140
 Non-equilibrium radiation nuclear reactor
 [NASA-CASE-HQN-10841-1] c73 N78-19920
 Cooling system for removing metabolic heat from an hermetically sealed spacesuit
 [NASA-CASE-ARC-11059-1] c54 N78-32721
 Safety flywheel
 [NASA-CASE-HQN-10888-1] c44 N79-14527
 Flow diverter valve and flow diversion method
 [NASA-CASE-HQN-00573-1] c37 N79-33468
 Solar power satellite system
 [NASA-CASE-HQN-10949-1] c44 N81-16530
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION. AMES RESEARCH CENTER, HOFFETT FIELD, CALIF.
 Nonmagnetic thermal motor for a magnetometer
 [NASA-CASE-XAR-03786] c09 N69-21313
 Balanced bellows spirometer
 [NASA-CASE-XAR-01547] c05 N69-21473
 Cryogenic apparatus for measuring the intensity of magnetic fields
 [NASA-CASE-XAC-02407] c14 N69-27423
 Variable stiffness polymeric damper
 [NASA-CASE-XAC-11225] c14 N69-27486
 Shock-layer radiation measurement
 [NASA-CASE-XAC-02970] c14 N69-39896
 Protective circuit of the spark gap type
 [NASA-CASE-XAC-08981] c09 N69-39897
 Apparatus for coupling a plurality of ungrounded circuits to a grounded circuit Patent
 [NASA-CASE-XAC-00086] c09 N70-33182
 Two-plane balance Patent
 [NASA-CASE-XAC-00073] c14 N70-34813
 Centrifuge mounted motion simulator Patent
 [NASA-CASE-XAC-00399] c11 N70-34815
 Differential pressure cell Patent
 [NASA-CASE-XAC-00042] c14 N70-34816
 High-temperature, high-pressure spherical segment valve Patent
 [NASA-CASE-XAC-00074] c15 N70-34817
 Magnetically centered liquid column float Patent
 [NASA-CASE-XAC-00030] c14 N70-34820
 Propeller blade loading control Patent
 [NASA-CASE-XAC-00139] c02 N70-34856

Temperature compensated solid state differential amplifier Patent
[NASA-CASE-XAC-00435] c09 N70-35440

High speed low level electrical stepping switch Patent
[NASA-CASE-XAC-00060] c09 N70-39915

Analog-to-digital conversion system Patent
[NASA-CASE-XAC-00404] c08 N70-40125

Null-type vacuum microbalance Patent
[NASA-CASE-XAC-00472] c15 N70-40180

Thermo-protective device for balances Patent
[NASA-CASE-XAC-00648] c14 N70-40400

Three-axis controller Patent
[NASA-CASE-XAC-01404] c05 N70-41581

Electric arc device for heating gases Patent
[NASA-CASE-XAC-00319] c25 N70-41628

Dynamic sensor Patent
[NASA-CASE-XAC-02877] c14 N70-41681

Universal pilot restraint suit and body support therefor Patent
[NASA-CASE-XAC-00405] c05 N70-41819

Proportional controller Patent
[NASA-CASE-XAC-03392] c03 N70-41954

Force transducer Patent
[NASA-CASE-XAC-01101] c14 N70-41957

Electrode construction Patent
[NASA-CASE-ARC-10043-1] c05 N71-11193

Telemeter adaptable for implanting in an animal Patent
[NASA-CASE-XAC-05706] c05 N71-12342

Gyration type circuit Patent
[NASA-CASE-XAC-10608-1] c09 N71-12517

Ultraviolet resonance lamp Patent
[NASA-CASE-ARC-10030] c09 N71-12521

Differential temperature transducer Patent
[NASA-CASE-XAC-00812] c14 N71-15598

Multiple circuit switch apparatus with improved pivot actuator structure Patent
[NASA-CASE-XAC-03777] c10 N71-15909

Method of planetary atmospheric investigation using a split-trajectory dual flyby mode Patent
[NASA-CASE-XAC-08494] c30 N71-15990

High efficiency multivibrator Patent
[NASA-CASE-XAC-00942] c10 N71-16042

Apparatus for measuring conductivity and velocity of plasma utilizing a plurality of sensing coils positioned in the plasma Patent
[NASA-CASE-XAC-05695] c25 N71-16073

Flight craft Patent
[NASA-CASE-XAC-02058] c02 N71-16087

Three-axis finger tip controller for switches Patent
[NASA-CASE-XAC-02405] c09 N71-16089

Electrostatic charged particle analyzer having deflection members shaped according to the periodic voltage applied thereto Patent
[NASA-CASE-XAC-05506-1] c24 N71-16095

Inertial reference apparatus Patent
[NASA-CASE-XAC-03107] c23 N71-16098

Pastener apparatus Patent
[NASA-CASE-ARC-10140-1] c15 N71-17653

Stabilization of gravity oriented satellites Patent
[NASA-CASE-XAC-01591] c31 N71-17729

Microwave flaw detector Patent
[NASA-CASE-ARC-10009-1] c15 N71-17822

Hypervelocity gun Patent
[NASA-CASE-XAC-05902] c11 N71-18578

Nonlinear analog-to-digital converter Patent
[NASA-CASE-XAC-04031] c08 N71-18594

Demodulation system Patent
[NASA-CASE-XAC-04030] c10 N71-19472

Phase quadrature-plural channel data transmission system Patent
[NASA-CASE-XAC-06302] c08 N71-19763

Two force component measuring device Patent
[NASA-CASE-XAC-04886-1] c14 N71-20439

Attitude controls for VTOL aircraft Patent
[NASA-CASE-XAC-08972] c02 N71-20570

Electric arc apparatus Patent
[NASA-CASE-XAC-01677] c09 N71-20816

Inertia diaphragm pressure transducer Patent
[NASA-CASE-XAC-02981] c14 N71-21072

Stirring apparatus for plural test tubes Patent
[NASA-CASE-XAC-06956] c15 N71-21177

Exposure system for animals Patent
[NASA-CASE-XAC-05333] c11 N71-22875

Vibrating element electrometer with output signal magnified over input signal by a

function of the mechanical Q of the vibrating element Patent
[NASA-CASE-XAC-02807] c09 N71-23021

Hall current measuring apparatus having a series resistor for temperature compensation Patent
[NASA-CASE-XAC-01662] c14 N71-23037

Transfer valve Patent
[NASA-CASE-XAC-01158] c15 N71-23051

Hard space suit Patent
[NASA-CASE-XAC-07043] c05 N71-23161

Method and apparatus for continuously monitoring blood oxygenation, blood pressure, pulse rate and the pressure pulse curve utilizing an ear oximeter as transducer Patent
[NASA-CASE-XAC-05422] c04 N71-23185

Feedback integrator with grounded capacitor Patent
[NASA-CASE-XAC-10607] c10 N71-23669

Floating two force component measuring device Patent
[NASA-CASE-XAC-04885] c14 N71-23790

Control device Patent
[NASA-CASE-XAC-10019] c15 N71-23809

Means for suppressing or attenuating bending motion of elastic bodies Patent
[NASA-CASE-XAC-05632] c32 N71-23971

Device for measuring pressure Patent
[NASA-CASE-XAC-04458] c14 N71-24232

Transducer circuit and catheter transducer Patent
[NASA-CASE-ARC-10132-1] c09 N71-24597

Skeletal stressing method and apparatus Patent
[NASA-CASE-ARC-10100-1] c05 N71-24738

Modified polyurethane foams for fuel-fire Patent
[NASA-CASE-ARC-10098-1] c06 N71-24739

Deep space monitor communication satellite system Patent
[NASA-CASE-XAC-06029-1] c31 N71-24813

Laser fluid velocity detector Patent
[NASA-CASE-XAC-10770-1] c16 N71-24828

Transient video signal recording with expanded playback Patent
[NASA-CASE-ARC-10003-1] c09 N71-25866

Thermally cycled magnetometer Patent
[NASA-CASE-XAC-03740] c14 N71-26135

Optical machine tool alignment indicator Patent
[NASA-CASE-XAC-09489-1] c15 N71-26673

Energy limiter for hydraulic actuators Patent
[NASA-CASE-ARC-10131-1] c15 N71-27754

Multivibrator circuit with means to prevent false triggering from supply voltage fluctuations Patent
[NASA-CASE-ARC-10137-1] c09 N71-28468

Locomotion and restraint aid Patent
[NASA-CASE-ARC-10153] c05 N71-28619

Line following servosystem Patent
[NASA-CASE-XAC-00001] c15 N71-28952

Mechanically limited, electrically operated hydraulic valve system for aircraft controls Patent
[NASA-CASE-XAC-00048] c02 N71-29128

Precision rectifier with FET switching means Patent
[NASA-CASE-ARC-10101-1] c09 N71-33109

Solar cell Patent
[NASA-CASE-ARC-10050] c03 N71-33409

Phase shift circuit apparatus
[NASA-CASE-ARC-10269-1] c10 N72-16172

High intensity radiant energy pulse source having means for opening shutter when light flux has reached a desired level
[NASA-CASE-ARC-10178-1] c09 N72-17152

Telemetry actuated switch
[NASA-CASE-ARC-10105] c09 N72-17153

Active RC networks
[NASA-CASE-ARC-10020] c10 N72-17172

Apparatus for automatically stabilizing the attitude of a nonguided vehicle
[NASA-CASE-ARC-10134] c30 N72-17873

Flexible fire retardant foam
[NASA-CASE-ARC-10180-1] c28 N72-20767

Method and apparatus for swept-frequency impedance measurements of welds
[NASA-CASE-ARC-10176-1] c15 N72-21464

Space suit having improved waist and torso movement
[NASA-CASE-ARC-10275-1] c05 N72-22092

RF controlled solid state switch
[NASA-CASE-ARC-10136-1] c09 N72-22202

Wide range dynamic pressure sensor
[NASA-CASE-ARC-10263-1] c14 N72-22438

Method and apparatus for measuring the damping characteristics of a structure
[NASA-CASE-ARC-10154-1] c14 N72-22440

Magnetic position detection method and apparatus
[NASA-CASE-ARC-10179-1] c21 N72-22619

Fluidic proportional thruster system
[NASA-CASE-ARC-10106-1] c28 N72-22769

Thermoelectric radiometer utilizing polymer film
[NASA-CASE-ARC-10138-1] c14 N72-24477

Polymeric vehicles as carriers for sulfonic acid salt of nitrosubstituted aromatic amines
[NASA-CASE-ARC-10325] c06 N72-25147

Stereoscopic television system and apparatus
[NASA-CASE-ARC-10160-1] c23 N72-27728

Metallic intrusion detector system
[NASA-CASE-ARC-10265-1] c10 N72-28240

Apparatus for ionization analysis
[NASA-CASE-ARC-10017-1] c14 N72-29464

Nondispersive gas analyzing method and apparatus wherein radiation is serially passed through a reference and unknown gas
[NASA-CASE-ARC-10308-1] c06 N72-31141

Two degree inverted flexure
[NASA-CASE-ARC-10345-1] c15 N73-12488

Intumescent paint containing nitrile rubber
[NASA-CASE-ARC-10196-1] c18 N73-13562

Temperature compensated light source using a light emitting diode
[NASA-CASE-ARC-10467-1] c09 N73-14214

Self-tuning bandpass filter
[NASA-CASE-ARC-10264-1] c09 N73-20231

Micrometeoroid analyzer
[NASA-CASE-ARC-10443-1] c14 N73-20477

Multiple pass reimaging optical system
[NASA-CASE-ARC-10194-1] c23 N73-20741

Intruder detection system
[NASA-CASE-ARC-10097-2] c07 N73-25160

Interferometric rotation sensor
[NASA-CASE-ARC-10278-1] c14 N73-25463

Dual-fuselage aircraft having yawable wing and horizontal stabilizer
[NASA-CASE-ARC-10470-1] c02 N73-26005

Temperature controller for a fluid cooled garment
[NASA-CASE-ARC-10599-1] c05 N73-26071

Visual examination apparatus
[NASA-CASE-ARC-10329-1] c05 N73-26072

Intumescent composition, foamed product prepared therewith, and process for making same
[NASA-CASE-ARC-10304-1] c18 N73-26572

Infrared tunable laser
[NASA-CASE-ARC-10463-1] c09 N73-32111

Low power electromagnetic flowmeter providing accurate zero set
[NASA-CASE-ARC-10362-1] c14 N73-32326

Hand-held photomicroscope
[NASA-CASE-ARC-10468-1] c14 N73-33361

Alignment apparatus using a laser having a gravitationally sensitive cavity reflector
[NASA-CASE-ARC-10444-1] c16 N73-33397

Polyimide foam for the thermal insulation and fire protection
[NASA-CASE-ARC-10464-1] c27 N74-12812

Flexible fire retardant polyisocyanate modified neoprene foam
[NASA-CASE-ARC-10180-1] c27 N74-12814

Heater-mixer for stored fluids
[NASA-CASE-ARC-10442-1] c35 N74-15093

Bimetallic fluid displacement apparatus
[NASA-CASE-ARC-10441-1] c35 N74-15126

Automatic real-time pair-feeding system for animals
[NASA-CASE-ARC-10302-1] c51 N74-15778

Overvoltage protection network
[NASA-CASE-ARC-10197-1] c33 N74-17929

Ultrasonic biomedical measuring and recording apparatus
[NASA-CASE-ARC-10597-1] c52 N74-20726

Ultraviolet and thermally stable polymer compositions
[NASA-CASE-ARC-10592-1] c27 N74-21156

High speed shutter
[NASA-CASE-ARC-10516-1] c70 N74-21300

Bio-isolated dc operational amplifier
[NASA-CASE-ARC-10596-1] c33 N74-21851

Programmable physiological infusion
[NASA-CASE-ARC-10447-1] c52 N74-22771

Chrono-fluorographic drug detector
[NASA-CASE-ARC-10633-1] c25 N74-26947

Intumescent composition, foamed product prepared therewith and process for making same
[NASA-CASE-ARC-10304-2] c27 N74-27037

Photomultiplier circuit including means for rapidly reducing the sensitivity thereof
[NASA-CASE-ARC-10593-1] c33 N74-27682

G-load measuring and indicator apparatus
[NASA-CASE-ARC-10806] c06 N74-27872

Concentric differential gearing arrangement
[NASA-CASE-ARC-10462-1] c37 N74-27901

Measurement of plasma temperature and density using radiation absorption
[NASA-CASE-ARC-10598-1] c75 N74-30156

Abating exhaust noises in jet engines
[NASA-CASE-ARC-10712-1] c07 N74-33218

Solid medium thermal engine
[NASA-CASE-ARC-10461-1] c44 N74-33379

Automated analysis of oxidative metabolites
[NASA-CASE-ARC-10469-1] c25 N75-12086

Method of preparing water purification membranes
[NASA-CASE-ARC-10643-1] c25 N75-12087

Method of forming aperture plate for electron microscope
[NASA-CASE-ARC-10448-2] c74 N75-12732

Integrated lift/drag controller for aircraft
[NASA-CASE-ARC-10456-1] c05 N75-12930

Wind tunnel flow generation section
[NASA-CASE-ARC-10710-1] c09 N75-12969

Continuous Fourier transform method and apparatus
[NASA-CASE-ARC-10466-1] c60 N75-13539

Dual wavelength scanning Doppler velocimeter
[NASA-CASE-ARC-10637-1] c35 N75-16783

Signal conditioning circuit apparatus
[NASA-CASE-ARC-10348-1] c33 N75-19518

Diode-quad bridge circuit means
[NASA-CASE-ARC-10364-3] c33 N75-19520

Reversed cowl flap inlet thrust augmentor
[NASA-CASE-ARC-10754-1] c07 N75-24736

Diode-quad bridge circuit means
[NASA-CASE-ARC-10364-2] c33 N75-25041

Rotary plant growth accelerating apparatus
[NASA-CASE-ARC-10722-1] c51 N75-25503

Shoulder harness and lap belt restraint system
[NASA-CASE-ARC-10519-2] c05 N75-25915

Gas chromatograph injection system
[NASA-CASE-ARC-10344-2] c35 N75-26334

Reference apparatus for medical ultrasonic transducer
[NASA-CASE-ARC-10753-1] c54 N75-27760

Electric arc light source having undercut recessed anode
[NASA-CASE-ARC-10266-1] c33 N75-29318

G-load measuring and indicator apparatus
[NASA-CASE-ARC-10806-1] c35 N75-29381

NDIR gas analyzer based on absorption modulation ratios for known and unknown samples
[NASA-CASE-ARC-10802-1] c35 N75-30502

Diatomic infrared gasdynamic laser
[NASA-CASE-ARC-10370-1] c36 N75-31426

Pneumatic load compensating or controlling system
[NASA-CASE-ARC-10907-1] c37 N75-32465

Combined dual scatter, local oscillator laser Doppler velocimeter
[NASA-CASE-ARC-10642-1] c36 N76-14447

Fiber modified polyurethane foam for ballistic protection
[NASA-CASE-ARC-10714-1] c27 N76-15310

Transparent fire resistant polymeric structures
[NASA-CASE-ARC-10813-1] c27 N76-16230

Noise suppressor for turbo fan jet engines
[NASA-CASE-ARC-10812-1] c07 N76-18131

Modulated hydrogen ion flame detector
[NASA-CASE-ARC-10322-1] c35 N76-18403

Electrical conductivity cell and method for fabricating the same
[NASA-CASE-ARC-10810-1] c33 N76-19339

Method and apparatus for compensating reflection losses in a path length modulated absorption-absorption trace gas detector
[NASA-CASE-ARC-10631-1] c74 N76-20958

Trielectrode capacitive pressure transducer
[NASA-CASE-ARC-10711-2] c33 N76-21390

Nulling device for detection of trace gases by NDIR absorption
[NASA-CASE-ARC-10760-1] c25 N76-22323

Silica reusable surface insulation
[NASA-CASE-ARC-10721-1] c27 N76-22376

Optical alignment device
[NASA-CASE-ARC-10932-1] c74 N76-22993

Vehicle simulator binocular multiplanar visual display system
[NASA-CASE-ARC-10808-1] c09 N76-24280

Readout electrode assembly for measuring biological impedance
[NASA-CASE-ARC-10816-1] c35 N76-24525

System for measuring Reynolds in a turbulently flowing fluid
[NASA-CASE-ARC-10755-2] c34 N76-27517

Oblique-wing supersonic aircraft
[NASA-CASE-ARC-10470-3] c05 N76-25217

Accelerometer telemetry system
[NASA-CASE-ARC-10849-1] c17 N76-29347

Miniature ingestible telemeter devices to measure deep-body temperature
[NASA-CASE-ARC-10563-1] c52 N76-25894

Visual examination apparatus
[US-PATENT-BE-28,921] c52 N76-30793

Integrated structure vacuum tube
[NASA-CASE-ARC-10445-1] c31 N76-31365

Ultraviolet and thermally stable polymer compositions
[NASA-CASE-ARC-10592-2] c27 N76-32315

Bioomedical ultrasonoscope
[NASA-CASE-ARC-10994-1] c52 N76-33835

Thermistor holder for skin temperature measurements
[NASA-CASE-ARC-10855-1] c52 N77-10780

Spectrally balanced chromatic landing approach lighting system
[NASA-CASE-ARC-10990-1] c04 N77-12031

Smoke generator
[NASA-CASE-ARC-10905-1] c37 N77-13418

Electron microscope aperture system
[NASA-CASE-ARC-10448-3] c35 N77-14408

Liquid cooled brassiere and method of diagnosing malignant tumors therewith
[NASA-CASE-ARC-11007-1] c52 N77-14736

Hingeless helicopter rotor with improved stability
[NASA-CASE-ARC-10807-1] c05 N77-17029

The engine air intake system
[NASA-CASE-ARC-10761-1] c07 N77-18154

Spring operated accelerator and constant force spring mechanism therefor
[NASA-CASE-ARC-10898-1] c35 N77-18417

Rotating launch device for a remotely piloted aircraft
[NASA-CASE-ARC-10979-1] c09 N77-19076

Tubular sublimatory evaporator heat sink
[NASA-CASE-ARC-10912-1] c34 N77-19353

Selective data segment monitoring system
[NASA-CASE-ARC-10899-1] c60 N77-19760

All sky pointing attitude control system
[NASA-CASE-ARC-10716-1] c35 N77-20399

Metallic hot wire anemometer
[NASA-CASE-ARC-10911-1] c35 N77-20400

Optical instrument employing reticle having preselected visual response pattern formed thereon
[NASA-CASE-ARC-10976-1] c74 N77-22950

Abrasion resistant coatings for plastic surfaces
[NASA-CASE-ARC-10915-3] c24 N77-24200

Sampling video compression system
[NASA-CASE-ARC-10984-1] c32 N77-24328

Method for making a hot wire anemometer and product thereof
[NASA-CASE-ARC-10900-1] c35 N77-24454

Pseudo-backscatter laser Doppler velocimeter employing antiparallel-reflector in the forward direction
[NASA-CASE-ARC-10970-1] c36 N77-25501

System for measuring three fluctuating velocity components in a turbulently flowing fluid
[NASA-CASE-ARC-10974-1] c34 N77-27345

Twin-capacitive shaft angle encoder with analog output signal
[NASA-CASE-ARC-10897-1] c33 N77-31404

Anthropomorphic master/slave manipulator system
[NASA-CASE-ARC-10756-1] c54 N77-32721

Mechanical energy storage device for hip disarticulation
[NASA-CASE-ARC-10916-1] c52 N78-10686

Optically selective, acoustically resonant gas detecting transducer
[NASA-CASE-ARC-10639-1] c35 N78-13400

Intumescent coatings containing 4,4'-dinitrosulfanilide
[NASA-CASE-ARC-11042-1] c24 N78-14096

Automatic multiple-sample applicator and electrophoresis apparatus
[NASA-CASE-ARC-10991-1] c25 N78-14104

Flow separation detector
[NASA-CASE-ARC-11046-1] c35 N78-14364

Honeycomb-laminate composite structure
[NASA-CASE-ARC-10913-1] c24 N78-15180

Heat pipe with dual working fluids
[NASA-CASE-ARC-10198] c34 N78-17336

Multi-chamber controllable heat pipe
[NASA-CASE-ARC-10199] c34 N78-17337

Walking boot assembly
[NASA-CASE-ARC-11101-1] c54 N78-17675

Full color hybrid display for aircraft simulators
[NASA-CASE-ARC-10903-1] c09 N78-18083

Apparatus for measuring a sorbate dispersed in a fluid stream
[NASA-CASE-ARC-10896-1] c35 N78-19465

Automatic fluid dispenser
[NASA-CASE-ARC-10820-1] c35 N78-19466

Synthesis of multifunction triaryltrifluoroethanes
[NASA-CASE-ARC-11097-1] c23 N78-22154

Synthesis of multifunction triaryltrifluoroethanes
[NASA-CASE-ARC-11097-2] c23 N78-22155

Intumescent-ablator coatings using endothermic fillers
[NASA-CASE-ARC-11043-1] c24 N78-27180

Low density bismaleimide-carbon microballoon composites
[NASA-CASE-ARC-11040-2] c24 N78-27184

Rotary leveling base platform
[NASA-CASE-ARC-10981-1] c37 N78-27425

Tread drum for animals
[NASA-CASE-ARC-10917-1] c51 N78-27733

Polymeric foams from cross-linkable poly-n-arylenebenzimidazoles
[NASA-CASE-ARC-11008-1] c27 N78-31232

Boron trifluoride coatings for thermoplastic materials and method of applying same in glow discharge
[NASA-CASE-ARC-11057-1] c27 N78-31233

Spacesuit mobility joints
[NASA-CASE-ARC-11058-1] c54 N78-31735

Spacesuit torso closure
[NASA-CASE-ARC-11100-1] c54 N78-31736

Process for preparing higher oxides of the alkali and alkaline earth metals
[NASA-CASE-ARC-10992-1] c26 N78-32229

Reaction cured glass and glass coatings
[NASA-CASE-ARC-11051-1] c27 N78-32260

Angle detector
[NASA-CASE-ARC-11036-1] c35 N78-32395

Spray coating apparatus having a rotatable workpiece holder
[NASA-CASE-ARC-11110-1] c37 N78-32434

Process for producing a well-adhered durable optical coating on an optical plastic substrate
[NASA-CASE-ARC-11039-1] c74 N78-32854

Process for the preparation of calcium superoxide
[NASA-CASE-ARC-11053-1] c25 N79-10162

Contour detector and data acquisition system for the left ventricular outline
[NASA-CASE-ARC-10985-1] c52 N79-10724

Ambient cure polyimide foams
[NASA-CASE-ARC-11170-1] c27 N79-11215

Microelectrophoretic apparatus and process
[NASA-CASE-ARC-11121-1] c25 N79-14169

Preparation of dielectric coating of variable dielectric constant by plasma polymerization
[NASA-CASE-ARC-10892-2] c27 N79-14214

Electric discharge for treatment of trace contaminants
[NASA-CASE-ARC-10975-1] c33 N79-15245

Low density bismaleimide-carbon microballoon composites
[NASA-CASE-ARC-11040-1] c24 N79-16915

Constant lift rotor for a heavier than air craft
[NASA-CASE-ARC-11045-1] c05 N79-17847

Oxygen post-treatment of plastic surface coated with plasma polymerized silicon-containing monomers
[NASA-CASE-ARC-10915-2] c27 N79-18052

Miniature implantable ultrasonic echosonometer
[NASA-CASE-ARC-11035-1] c52 N79-18580

Preparation of heterocyclic block copolymer omega-dianidoximes
[NASA-CASE-ARC-11060-1] c27 N79-22300

High acceleration cable deployment system
[NASA-CASE-ARC-11256-1] c37 N79-23432

Fibrous refractory composite insulation
[NASA-CASE-ABC-11169-1] c24 N79-24062

Spacesuit mobility knee joints
[NASA-CASE-ABC-11058-2] c54 N79-24651

Pire protection covering for small diameter missiles
[NASA-CASE-ABC-11104-1] c15 N79-26100

Biomedical ultrasonoscope
[NASA-CASE-ABC-10994-2] c52 N79-26771

Controller arm for a remotely related slave arm
[NASA-CASE-ABC-11052-1] c37 N79-28551

An improved synthesis of 2, 4, 8, 10-tetroxaspiro (5.5)undecane
[NASA-CASE-ABC-11243-1] c27 N79-30375

Improved synthesis of polyformals
[NASA-CASE-ABC-11244-1] c27 N79-30376

Electrical short locator
[NASA-CASE-ABC-11116-1] c33 N79-31498

Environmental fog/rain visual display system for aircraft simulators
[NASA-CASE-ABC-11158-1] c09 N79-33220

Use of glow discharge in fluidized beds
[NASA-CASE-ABC-11245-1] c33 N80-11326

Acoustically swept rotor
[NASA-CASE-ABC-11106-1] c05 N80-14107

Catalysts for polyimide foams from aromatic isocyanates and aromatic dianhydrides
[NASA-CASE-ABC-11107-1] c25 N80-16116

Cryogenic container compound suspension strap
[NASA-CASE-ABC-11157-1] c37 N80-16393

Induction powered biological radiosonde
[NASA-CASE-ABC-11120-1] c52 N80-18691

Carboranylcyclotriphosphazenes and their polymers
[NASA-CASE-ABC-11176-1] c27 N80-21533

Method for making patterns for resin matrix composites
[NASA-CASE-ABC-11246-1] c24 N80-22410

Chelate-modified polymers for atmospheric gas chromatography
[NASA-CASE-ABC-11154-1] c25 N80-23383

Reverse osmosis membrane of high urea rejection properties
[NASA-CASE-ABC-10980-1] c27 N80-23452

Adjustable high emittance gap filler
[NASA-CASE-ABC-11310-1] c27 N80-23454

Reduction of nitric oxide emissions from a combustor
[NASA-CASE-ABC-10814-2] c07 N80-26298

Preparation of perfluorinated imidoylamidoximes
[NASA-CASE-ABC-11267-1] c23 N80-26386

Preparation of perfluorinated 1,2,4-oxadiazoles
[NASA-CASE-ABC-11267-2] c25 N80-26407

Pressure suit joint analyzer
[NASA-CASE-ABC-11314-1] c54 N80-30043

An improved synthesis of 2,4,8,10-tetroxaspiro (5.5) undecane
[NASA-CASE-ABC-11243-2] c23 N80-31472

Synthesis of dawsonites
[NASA-CASE-ABC-113261-1] c25 N80-31490

Aircraft engine nozzle
[NASA-CASE-ABC-10977-1] c07 N80-32392

Pocket ECG electrode
[NASA-CASE-ABC-11258-1] c52 N80-33081

Structural wood panels with improved fire resistance
[NASA-CASE-ABC-11174-1] c24 N81-13999

Perfluoroalkyl polytriazines containing pendent iododifluoromethyl groups
[NASA-CASE-ABC-11241-1] c25 N81-14016

Micro-fluid exchange coupling apparatus
[NASA-CASE-ABC-11114-1] c51 N81-14605

Subcutaneous electrode structure
[NASA-CASE-ABC-11117-1] c52 N81-14612

Indomethacin-antihistamine combination for gastric ulceration control
[NASA-CASE-ABC-11118-2] c52 N81-14613

Rhomboid prism pair for rotating the plane of parallel light beams
[NASA-CASE-ABC-11311-1] c74 N81-16882

Process for the preparation of fluorine containing crosslinked elastomeric polytriazine and product so produced
[NASA-CASE-ABC-11248-1] c27 N81-17259

The 1,2,4-oxadiazole elastomers
[NASA-CASE-ABC-11253-1] c27 N81-17262

Pressure control valve
[NASA-CASE-ABC-11251-1] c37 N81-17433

Intrusion detection method and apparatus
[NASA-CASE-ABC-11317-1] c35 N81-19430

Sidelooking laser altimeter for a flight simulator
[NASA-CASE-ABC-11312-1] c36 N81-19439

Autonomous navigation system
[NASA-CASE-ABC-11257-1] c04 N81-21047

Bifunctional monomers having terminal oxime and cyano or amidine groups
[NASA-CASE-ABC-11253-3] c27 N81-24256

Spine immobilization apparatus
[NASA-CASE-ABC-11167-1] c52 N81-25662

Process for the preparation of polycarboranylphosphazenes
[NASA-CASE-ABC-11176-2] c27 N81-27271

Phosphorus-containing bisimide resins
[NASA-CASE-ABC-11321-1] c27 N81-27272

Refrigerator module, system and process
[NASA-CASE-ABC-11263-1] c31 N81-27328

Method of carbonizing polyacrylonitrile fibers and resulting product
[NASA-CASE-ABC-11261-1] c24 N81-29164

Dual-beam skin friction interferometer
[NASA-CASE-ABC-11354-1] c36 N81-29415

Sweat collection capsule
[NASA-CASE-ABC-11031-1] c52 N81-29763

Indomethacin-antihistamine combination for gastric ulceration control
[NASA-CASE-ABC-11118-1] c52 N81-29764

Resin composition, process for producing the same, product produced therefrom and process for producing said product
[NASA-CASE-ABC-11331-1] c27 N81-31363

Phosphorus-containing imide resins
[NASA-CASE-ABC-11368-1] c27 N81-31364

Non-invasive method and apparatus for measuring pressure within a pliable vessel
[NASA-CASE-ABC-11264-1] c52 N81-33804

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Fifth wheel
[NASA-CASE-FRC-10081-1] c37 N77-14477

Window comparator
[NASA-CASE-FRC-10090-1] c33 N78-18308

Wire stripper
[NASA-CASE-FRC-10111-1] c37 N79-10419

Free wing assembly for an aircraft
[NASA-CASE-FRC-10092-1] c05 N79-12061

Voltage regulator for battery power source
[NASA-CASE-FRC-10116-1] c33 N79-23345

An annular wing
[NASA-CASE-FRC-11007-2] c02 N79-24959

A system for providing an integrated display of instantaneous information relative to aircraft attitude, heading, altitude, and horizontal situation
[NASA-CASE-FRC-11005-1] c06 N79-24988

Superplastically formed diffusion bonded metallic structure
[NASA-CASE-FRC-11026-1] c39 N79-25424

Power converter
[NASA-CASE-FRC-11014-1] c33 N79-27395

Smoothing filter for digital to analog conversion
[NASA-CASE-FRC-11025-1] c60 N80-17723

Air speed and attitude probe
[NASA-CASE-FRC-11009-1] c06 N80-18036

Improved Sun-sensing guidance system for high-altitude aircraft
[NASA-CASE-FRC-11052-1] c04 N80-20249

Apparatus for damping operator induced oscillations of a controlled system
[NASA-CASE-FRC-11041-1] c33 N80-20488

Attaching of strain gages to substrates
[NASA-CASE-FRC-10093-1] c35 N80-20560

Computer circuit card puller
[NASA-CASE-FRC-11042-1] c37 N80-20589

Pulse transducer with artifact signal attenuator
[NASA-CASE-FRC-11012-1] c52 N80-23969

Portable device for use in starting air-start-units for aircraft and having cable lead testing capability
[NASA-CASE-FRC-10113-1] c33 N80-26599

System for use in conducting wake investigation for a wing in flight
[NASA-CASE-FRC-11024-1] c02 N80-28300

Active notch filter network with variable notch depth, width and frequency
[NASA-CASE-FRC-11055-1] c33 N80-29583

Multiple pure tone elimination strut assembly
[NASA-CASE-FRC-11062-1] c07 N80-32393

Improved low-drag ground vehicle particularly suited for use in safely transporting livestock

[NASA-CASE-FRC-11058-1] c85 N80-33312
 Skin friction measuring device for aircraft
 [NASA-CASE-FRC-11029-1] c06 N81-17057
 Method for observing the features characterizing
 the surface of a land mass
 [NASA-CASE-FRC-11013-1] c43 N81-17499
 Aircraft body-axis rotation measurement system
 [NASA-CASE-FRC-11043-1] c06 N81-22048
 Aircraft canopy lock
 [NASA-CASE-FRC-11065-1] c05 N81-24047
 Thermocouple, multiple junction reference oven
 [NASA-CASE-FRC-10112-1] c35 N81-26431
 Electrical servo actuator bracket
 [NASA-CASE-FRC-11044-1] c37 N81-33483
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.
ELECTRONICS RESEARCH CENTER, CAMBRIDGE, MASS.
 Method and apparatus for wavelength tuning of
 liquid lasers
 [NASA-CASE-ERC-10187] c16 N69-31343
 A method for the deposition of beta-silicon
 carbide by isoeptaxy
 [NASA-CASE-ERC-10120] c26 N69-33482
 Full flow with shut off and selective drainage
 control valve Patent application
 [NASA-CASE-ERC-10208] c15 N70-10867
 A method for selective gold diffusion of
 monolithic silicon devices and/or circuits
 Patent application
 [NASA-CASE-ERC-10072] c09 N70-11148
 Method and means for an improved electron beam
 scanning system Patent
 [NASA-CASE-ERC-10552] c09 N71-12539
 Apparatus and method for separating a
 semiconductor wafer Patent
 [NASA-CASE-ERC-10138] c26 N71-14354
 Focused image holography with extended sources
 Patent
 [NASA-CASE-ERC-10019] c16 N71-15551
 Recording and reconstructing focused image
 holograms Patent
 [NASA-CASE-ERC-10017] c16 N71-15567
 Sorption vacuum trap Patent
 [NASA-CASE-XER-09519] c14 N71-18483
 Voltage tunable Gunn-type microwave generator
 Patent
 [NASA-CASE-XER-07894] c09 N71-16721
 Array phasing device Patent
 [NASA-CASE-ERC-10046] c10 N71-16722
 Parametric microwave noise generator Patent
 [NASA-CASE-XER-11019] c09 N71-23598
 Saturation current protection apparatus for
 saturable core transformers Patent
 [NASA-CASE-ERC-10075] c09 N71-24800
 Repetitively pulsed, wavelength selective laser
 Patent
 [NASA-CASE-ERC-10178] c16 N71-24832
 Optical mirror apparatus Patent
 [NASA-CASE-ERC-10001] c23 N71-24868
 Unsaturating saturable core transformer Patent
 [NASA-CASE-ERC-10125] c09 N71-24893
 Leak detector wherein a probe is monitored with
 ultraviolet radiation Patent
 [NASA-CASE-ERC-10034] c15 N71-24896
 Method for detecting leaks in hermetically
 sealed containers Patent
 [NASA-CASE-ERC-10045] c15 N71-24910
 Satellite aided vehicle avoidance system Patent
 [NASA-CASE-ERC-10090] c21 N71-24948
 Transverse piezoresistance and pinch effect
 electromechanical transducers Patent
 [NASA-CASE-ERC-10088] c26 N71-25490
 A solid state acoustic variable time delay line
 Patent
 [NASA-CASE-ERC-10032] c10 N71-25900
 Method and means for recording and
 reconstructing holograms without use of a
 reference beam Patent
 [NASA-CASE-ERC-10020] c16 N71-26154
 Electromechanical control actuator system Patent
 [NASA-CASE-ERC-10022] c15 N71-26635
 Method and apparatus for detecting gross leaks
 Patent
 [NASA-CASE-ERC-10033] c14 N71-26672
 Field ionization electrodes Patent
 [NASA-CASE-ERC-10013] c09 N71-26678
 Voltage regulator Patent
 [NASA-CASE-ERC-10113] c09 N71-27053
 A multichannel photoionization chamber for
 absorption analysis Patent
 [NASA-CASE-ERC-10044-1] c14 N71-27090
 Pressure sensitive transducers Patent
 [NASA-CASE-ERC-10087] c14 N71-27334
 Constant frequency output two stage induction
 machine systems Patent
 [NASA-CASE-ERC-10065] c09 N71-27364
 Fluid power transmitting gas bearing Patent
 [NASA-CASE-ERC-10097] c15 N71-28465
 Color television systems using a single gun
 color cathode ray tube Patent
 [NASA-CASE-ERC-10098] c09 N71-28618
 Ion microprobe mass spectrometer for analyzing
 fluid materials Patent
 [NASA-CASE-ERC-10014] c14 N71-28863
 Orifice gross leak tester Patent
 [NASA-CASE-ERC-10150] c14 N71-28992
 Device for measuring light scattering wherein
 the measuring beam is successively reflected
 between a pair of parallel reflectors Patent
 [NASA-CASE-XER-11203] c14 N71-28994
 Quasi-optical microwave component Patent
 [NASA-CASE-ERC-10011] c07 N71-29065
 Multiple hologram recording and readout system
 Patent
 [NASA-CASE-ERC-10151] c16 N71-29131
 Plasma fluidic hybrid display Patent
 [NASA-CASE-ERC-10100] c09 N71-33519
 Optical systems having spatially invariant outputs
 [NASA-CASE-ERC-10248] c14 N72-17323
 Method of detecting impending saturation of
 magnetic cores
 [NASA-CASE-ERC-10089] c23 N72-17747
 Logarithmic function generator utilizing an
 exponentially varying signal in an inverse
 manner
 [NASA-CASE-ERC-10267] c09 N72-23173
 Method and apparatus for limiting field emission
 current
 [NASA-CASE-ERC-10015-2] c10 N72-27246
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.
FLIGHT RESEARCH CENTER, EDWARDS, CALIF.
 Rocket chamber leak test fixture
 [NASA-CASE-XFR-09479] c14 N69-27503
 Three axis controller Patent
 [NASA-CASE-XFR-00181] c21 N70-33279
 Catalyst bed removing tool Patent
 [NASA-CASE-XFR-00811] c15 N70-36901
 Two-axis controller Patent
 [NASA-CASE-XFR-04104] c03 N70-42073
 Controlled visibility device for an aircraft
 Patent
 [NASA-CASE-XFR-04147] c11 N71-10748
 Biomedical electrode arrangement Patent
 [NASA-CASE-XFR-10856] c05 N71-11189
 Lifting body Patent Application
 [NASA-CASE-FRC-10063] c01 N71-12217
 Energy management system for glider type vehicle
 Patent
 [NASA-CASE-XFR-00756] c02 N71-13421
 Quick attach mechanism Patent
 [NASA-CASE-XFR-05421] c15 N71-22994
 Heat flux measuring system Patent
 [NASA-CASE-XFR-03802] c33 N71-23085
 Threadless fastener apparatus Patent
 [NASA-CASE-XFR-05302] c15 N71-23254
 Traversing probe Patent
 [NASA-CASE-XFR-02007] c12 N71-24692
 Layout tool Patent
 [NASA-CASE-FRC-10005] c15 N71-26145
 Pulsed excitation voltage circuit for transducers
 [NASA-CASE-FRC-10036] c09 N72-22200
 Acoustical transducer calibrating system and
 apparatus
 [NASA-CASE-FRC-10060-1] c14 N73-27379
 Three-axis adjustable loading structure
 [NASA-CASE-FRC-10051-1] c35 N74-13129
 Terminal guidance system
 [NASA-CASE-FRC-10049-1] c04 N74-13420
 Full wave modulator-demodulator amplifier
 apparatus
 [NASA-CASE-FRC-10072-1] c33 N74-14939
 Rotating raster generator
 [NASA-CASE-FRC-10071-1] c32 N74-20813
NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.
GODDARD INST. FOR SPACE STUDIES, NEW YORK.
 Application of luciferase assay for ATP to
 antibiotic drug susceptibility
 [NASA-CASE-GSC-12039-1] c51 N77-22794

Method for fabricating a mass spectrometer inlet leak
[NASA-CASE-GSC-12077-1] c35 N77-24455

Length controlled stabilized mode-lock Nd:YAG laser
[NASA-CASE-GSC-11571-1] c36 N77-25499

Three phase full wave dc motor decoder
[NASA-CASE-GSC-11824-1] c33 N77-26386

A cervix-to-rectum measuring device in a radiation applicator for use in the treatment of cervical cancer
[NASA-CASE-GSC-12081-2] c52 N77-26796

Gregorian all-reflective optical system
[NASA-CASE-GSC-12058-1] c74 N77-26942

Opto-mechanical subsystem with temperature compensation through isothermal design
[NASA-CASE-GSC-12059-1] c35 N77-27366

Controlled caging and uncaging mechanism
[NASA-CASE-GSC-11063-1] c37 N77-27400

Wideband heterodyne receiver for laser communication system
[NASA-CASE-GSC-12053-1] c32 N77-28346

Method and apparatus for producing an image from a transparent object
[NASA-CASE-GSC-11989-1] c74 N77-28932

Pseudo noise code and data transmission method and apparatus
[NASA-CASE-GSC-12017-1] c32 N77-30308

Speech analyzer
[NASA-CASE-GSC-11898-1] c32 N77-30309

Automatic transponder
[NASA-CASE-GSC-12075-1] c32 N77-31350

Method of treating the surface of a glass member
[NASA-CASE-GSC-12110-1] c27 N77-32308

Flat-plate heat pipe
[NASA-CASE-GSC-11998-1] c34 N77-32413

Fluid sampling device
[NASA-CASE-GSC-12143-1] c35 N77-32456

Analog to digital converter for two-dimensional radiant energy array computers
[NASA-CASE-GSC-11839-3] c60 N77-32731

Remote sensing of vegetation and soil using microwave ellipsometry
[NASA-CASE-GSC-11976-1] c43 N78-10529

Memory device for two-dimensional radiant energy array computers
[NASA-CASE-GSC-11839-2] c60 N78-1C709

**NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.
GODDARD SPACE FLIGHT CENTER, GREENBELT, MD.**

Regulated dc to dc converter
[NASA-CASE-XGS-03429] c03 N69-21330

Apparatus for measuring swelling characteristics of membranes
[NASA-CASE-XGS-03865] c14 N69-21363

Tumbler system to provide random motion
[NASA-CASE-XGS-02437] c15 N69-21472

Automatic acquisition system for phase-lock loop
[NASA-CASE-XGS-04994] c09 N69-21543

Low power drain semi-conductor circuit
[NASA-CASE-XGS-04999] c09 N69-24317

Spacecraft battery seals
[NASA-CASE-XGS-03864] c15 N69-24320

Scanning aspect sensor employing an apertured disc and a commutator
[NASA-CASE-XGS-08266] c14 N69-27432

Monopulse system with an electronic scanner
[NASA-CASE-XGS-05582] c07 N69-27460

Ring counter
[NASA-CASE-XGS-03095] c09 N69-27463

Retrodirective optical system
[NASA-CASE-XGS-04480] c16 N69-27491

Time division multiplex system
[NASA-CASE-XGS-05918] c07 N69-35974

Doppler frequency spread correction device for multiplex transmissions
[NASA-CASE-XGS-02749] c07 N69-39978

Alkali-metal silicate protective coating
[NASA-CASE-XGS-04119] c18 N69-39979

Device for measuring electron-beam intensities and for subjecting materials to electron irradiation in an electron microscope
[NASA-CASE-XGS-01725] c14 N69-39982

Light sensitive digital aspect sensor Patent
[NASA-CASE-XGS-00359] c14 N70-34158

Method and apparatus for determining satellite orientation utilizing spatial energy sources Patent
[NASA-CASE-XGS-00466] c21 N70-34297

Binary magnetic memory device Patent
[NASA-CASE-XGS-00174] c08 N70-34743

Full binary adder Patent
[NASA-CASE-XGS-00689] c08 N70-34787

Ultra-long monostable multivibrator employing bistable semiconductor switch to allow charging of timing circuit Patent
[NASA-CASE-XGS-00381] c09 N70-34819

Space and atmospheric reentry vehicle Patent
[NASA-CASE-XGS-00260] c31 N70-37924

Variable frequency magnetic multivibrator Patent
[NASA-CASE-XGS-00458] c09 N70-38604

Switching mechanism with energy storage means Patent
[NASA-CASE-XGS-00473] c03 N70-38713

Variable frequency magnetic multivibrator Patent
[NASA-CASE-XGS-00131] c09 N70-38995

Stretch de-spin mechanism Patent
[NASA-CASE-XGS-00619] c30 N70-40016

Folding boom assembly Patent
[NASA-CASE-XGS-00938] c32 N70-41367

Cryogenic connector for vacuum use Patent
[NASA-CASE-XGS-02441] c15 N70-41629

Endless tape cartridge Patent
[NASA-CASE-XGS-00769] c14 N70-41647

Apparatus for producing three-dimensional recordings of fluorescence spectra Patent
[NASA-CASE-XGS-01231] c14 N70-41676

Method and apparatus for determining electromagnetic characteristics of large surface area passive reflectors Patent
[NASA-CASE-XGS-02608] c07 N70-41678

Prevention of pressure build-up in electrochemical cells Patent
[NASA-CASE-XGS-01419] c03 N70-41864

Variable time constant smoothing circuit Patent
[NASA-CASE-XGS-01983] c10 N70-41964

Endless tape transport mechanism Patent
[NASA-CASE-XGS-01223] c07 N71-10609

Reversible ring counter employing cascaded single SCR stages Patent
[NASA-CASE-XGS-01473] c09 N71-10673

Electronic beam switching commutator Patent
[NASA-CASE-XGS-01451] c09 N71-10677

Sun tracker with rotatable plane-parallel plate and two photocells Patent
[NASA-CASE-XGS-01159] c21 N71-10678

Non-magnetic battery case Patent
[NASA-CASE-XGS-00886] c03 N71-11053

Interconnection of solar cells Patent
[NASA-CASE-XGS-01475] c03 N71-11058

Frequency shift keyed demodulator Patent
[NASA-CASE-XGS-02889] c07 N71-11282

Bi-polar phase detector and corrector for split phase PCM data signals Patent
[NASA-CASE-XGS-01590] c07 N71-12392

Data processor having multiple sections activated at different times by selective power coupling to the sections Patent
[NASA-CASE-XGS-04767] c08 N71-12494

Position location system and method Patent
[NASA-CASE-GSC-10087-2] c21 N71-13958

Fire resistant coating composition Patent
[NASA-CASE-GSC-10072] c18 N71-14014

Passively regulated water electrolysis rocket engine Patent
[NASA-CASE-XGS-08729] c28 N71-14044

Attitude control system Patent
[NASA-CASE-XGS-04393] c21 N71-14159

Retrodirective modulator Patent
[NASA-CASE-GSC-10062] c14 N71-15605

Spacecraft attitude detection system by stellar reference Patent
[NASA-CASE-XGS-03431] c21 N71-15642

Cartwheel satellite synchronization system Patent
[NASA-CASE-XGS-05579] c31 N71-15676

Wide range linear fluxgate magnetometer Patent
[NASA-CASE-XGS-01587] c14 N71-15962

Low friction magnetic recording tape Patent
[NASA-CASE-XGS-00373] c23 N71-15978

Method for etching copper Patent
[NASA-CASE-XGS-06306] c17 N71-16044

Bacteriostatic conformal coating and methods of application Patent
[NASA-CASE-GSC-10007] c18 N71-16046

Serrrodyne frequency converter re-entrant amplifier system Patent
[NASA-CASE-XGS-01022] c07 N71-16088

Position location and data collection system and method Patent
[NASA-CASE-GSC-10083-1] c30 N71-16090

Position sensing device employing misaligned magnetic field generating and detecting apparatus Patent
[NASA-CASE-XGS-07514] c23 N71-16099

Optical tracker having overlapping reticles on parallel axes Patent
[NASA-CASE-XGS-05715] c23 N71-16100

Self-erecting reflector Patent
[NASA-CASE-XGS-09190] c31 N71-16102

Dust particle injector for hypervelocity accelerators Patent
[NASA-CASE-XGS-06628] c24 N71-16213

Ellipsoidal mirror reflectometer including means for averaging the radiation reflected from the sample Patent
[NASA-CASE-XGS-05291] c23 N71-16341

Angular position and velocity sensing apparatus Patent
[NASA-CASE-XGS-05680] c14 N71-17585

Apparatus for controlling the velocity of an electromechanical drive for interferometers and the like Patent
[NASA-CASE-XGS-03532] c14 N71-17627

Omni-directional anisotropic molecular trap Patent
[NASA-CASE-XGS-00783] c30 N71-17788

Method of making tubes Patent
[NASA-CASE-XGS-04175] c15 N71-18579

Pulse-type magnetic core memory element circuit with blocking oscillator feedback Patent
[NASA-CASE-XGS-03303] c08 N71-18595

Ripple add and ripple subtract binary counters Patent
[NASA-CASE-XGS-04766] c08 N71-18602

Computing apparatus Patent
[NASA-CASE-XGS-04765] c08 N71-18693

Stepping motor control circuit Patent
[NASA-CASE-GSC-10366-1] c10 N71-18772

Traffic control system and method Patent
[NASA-CASE-GSC-10087-1] c02 N71-19287

Apparatus for measuring current flow Patent
[NASA-CASE-XGS-02439] c14 N71-19431

Synchronous counter Patent
[NASA-CASE-XGS-02440] c08 N71-19432

Wide range data compression system Patent
[NASA-CASE-XGS-02612] c08 N71-19435

Apparatus for computing square roots Patent
[NASA-CASE-XGS-04768] c08 N71-19437

Method and apparatus for battery charge control Patent
[NASA-CASE-XGS-05432] c03 N71-19438

Stable amplifier having a stable quiescent point Patent
[NASA-CASE-XGS-02812] c09 N71-19466

Tracking antenna system Patent
[NASA-CASE-GSC-10553-1] c07 N71-19854

Electrochemical coulometer and method of forming same Patent
[NASA-CASE-XGS-05434] c03 N71-20491

Display for binary characters Patent
[NASA-CASE-XGS-04987] c08 N71-20571

Amplifier clamping circuit for horizon scanner Patent
[NASA-CASE-XGS-01784] c10 N71-20782

Diversity receiving system with diversity phase lock Patent
[NASA-CASE-XGS-01222] c10 N71-20841

Signal detection and tracking apparatus Patent
[NASA-CASE-XGS-03502] c10 N71-20852

Polarization diversity monopulse tracking receiver Patent
[NASA-CASE-XGS-03501] c09 N71-20864

System for recording and reproducing pulse code modulated data Patent
[NASA-CASE-XGS-01021] c08 N71-21042

Satellite appendage tie down cord Patent
[NASA-CASE-XGS-02554] c31 N71-21064

Reaction wheel scanner Patent
[NASA-CASE-XGS-02629] c14 N71-21082

Nonmagnetic, explosive actuated indexing device Patent
[NASA-CASE-XGS-02422] c15 N71-21529

Bidirectional step torque filter with zero backlash characteristic Patent
[NASA-CASE-XGS-04227] c15 N71-21744

Conforming polisher for aspheric surface of revolution Patent
[NASA-CASE-XGS-02884] c15 N71-22705

Precision thrust gage Patent
[NASA-CASE-XGS-02319] c14 N71-22965

Sealing device for an electrochemical cell Patent
[NASA-CASE-XGS-02630] c03 N71-22974

Rotary bead dropper and selector for testing micrometeorite detectors Patent
[NASA-CASE-XGS-03304] c09 N71-22988

Moment of inertia test fixture Patent
[NASA-CASE-XGS-01023] c14 N71-22992

Fluid flow meter with comparator reference means Patent
[NASA-CASE-XGS-01331] c14 N71-22996

Foamed in place ceramic refractory insulating material Patent
[NASA-CASE-XGS-02435] c18 N71-22998

Digital telemetry system Patent
[NASA-CASE-XGS-01812] c07 N71-23001

Bonded elastomeric seal for electrochemical cells Patent
[NASA-CASE-XGS-02631] c03 N71-23006

Apparatus providing a directive field pattern and attitude sensing of a spin stabilized satellite Patent
[NASA-CASE-XGS-02607] c31 N71-23009

Complementary regenerative switch Patent
[NASA-CASE-XGS-02751] c09 N71-23015

Solid state pulse generator with constant output width, for variable input width, in nanosecond range Patent
[NASA-CASE-XGS-03427] c10 N71-23029

Sidereal frequency generator Patent
[NASA-CASE-XGS-02610] c14 N71-23174

Solar cell and circuit array and process for nullifying magnetic fields Patent
[NASA-CASE-XGS-03390] c03 N71-23187

Passive synchronized spike generator with high input impedance and low output impedance and capacitor power supply Patent
[NASA-CASE-XGS-03632] c09 N71-23311

Sealed electrochemical cell provided with a flexible casing Patent
[NASA-CASE-XGS-01513] c03 N71-23336

Digitally controlled frequency synthesizer Patent
[NASA-CASE-XGS-02317] c09 N71-23525

Radio frequency coaxial high pass filter Patent
[NASA-CASE-XGS-01418] c09 N71-23573

Apparatus for phase stability determination Patent
[NASA-CASE-XGS-01118] c10 N71-23662

Tape recorder Patent
[NASA-CASE-XGS-08259] c14 N71-23698

Balance torque meter Patent
[NASA-CASE-XGS-01013] c14 N71-23725

Mechanical actuator Patent
[NASA-CASE-XGS-04548] c15 N71-24045

Selective plating of etched circuits without removing previous plating Patent
[NASA-CASE-XGS-03120] c15 N71-24047

Alkali metal silicate protective coating Patent
[NASA-CASE-XGS-04799] c18 N71-24183

Strain gauge measuring techniques Patent
[NASA-CASE-XGS-04478] c14 N71-24233

Electromagnetic polarization systems and methods Patent
[NASA-CASE-GSC-10021-1] c09 N71-24595

Redundant actuating mechanism Patent
[NASA-CASE-XGS-08718] c15 N71-24600

Satellite communication system and method Patent
[NASA-CASE-GSC-10118-1] c07 N71-24621

Programmable telemetry system Patent
[NASA-CASE-GSC-10131-1] c07 N71-24624

Coulometer and third electrode battery charging circuit Patent
[NASA-CASE-GSC-10487-1] c03 N71-24719

Electronic scanning of 2-channel monopulse patterns Patent
[NASA-CASE-GSC-10299-1] c09 N71-24804

Annular slit colloid thruster Patent
[NASA-CASE-GSC-10709-1] c28 N71-25213

Voltage to frequency converter Patent
[NASA-CASE-GSC-10022-1] c10 N71-25882

Direct current motor with stationary armature and field Patent
[NASA-CASE-XGS-05290] c09 N71-25999

Buck boost voltage regulation circuit Patent
[NASA-CASE-GSC-10735-1] c10 N71-26085

Adaptive system and method for signal generation Patent
[NASA-CASE-GSC-11367] c10 N71-26374

Control apparatus for applying pulses of selectively predetermined duration to a sequence of loads Patent			
[NASA-CASE-XGS-04224]	c10	N71-26418	
Turn on transient limiter Patent			
[NASA-CASE-GSC-10413]	c10	N71-26531	
Voltage regulator with plural parallel power source sections Patent			
[NASA-CASE-GSC-10891-1]	c10	N71-26626	
Method for generating ultra-precise angles Patent			
[NASA-CASE-XGS-04173]	c19	N71-26674	
Resettable monostable pulse generator Patent			
[NASA-CASE-GSC-11139]	c09	N71-27016	
Micro-pound extended range thrust stand Patent			
[NASA-CASE-GSC-10710-1]	c28	N71-27094	
Synchronous dc direct drive system Patent			
[NASA-CASE-GSC-10065-1]	c10	N71-27136	
Antenna array at focal plane of reflector with coupling network for beam switching Patent			
[NASA-CASE-GSC-10220-1]	c07	N71-27233	
Gravity gradient attitude control system Patent			
[NASA-CASE-GSC-10555-1]	c21	N71-27324	
Segmented superconducting magnet for a broadband traveling wave maser Patent			
[NASA-CASE-XGS-10518]	c16	N71-28554	
Millimeter wave antenna system Patent Application			
[NASA-CASE-GSC-10949-1]	c07	N71-28965	
Sampled data controller Patent			
[NASA-CASE-GSC-10554-1]	c08	N71-29033	
Variable digital processor including a register for shifting and rotating bits in either direction Patent			
[NASA-CASE-GSC-10186]	c08	N71-33110	
Combustion products generating and metering device			
[NASA-CASE-GSC-11095-1]	c14	N72-10375	
Analog spatial maneuver computer			
[NASA-CASE-GSC-10880-1]	c08	N72-11172	
Helical recorder arrangement for multiple channel recording on both sides of the tape			
[NASA-CASE-GSC-10614-1]	c09	N72-11224	
Method and apparatus for eliminating coherent noise in a coherent energy imaging system without destroying spatial coherence			
[NASA-CASE-GSC-11133-1]	c23	N72-11568	
Position location system and method			
[NASA-CASE-GSC-10087-3]	c07	N72-12080	
Pacsimile video remodulation network			
[NASA-CASE-GSC-10185-1]	c07	N72-12081	
Frangible electrochemical cell			
[NASA-CASE-XGS-10010]	c03	N72-15986	
Caterpillar micro positioner			
[NASA-CASE-GSC-10780-1]	c14	N72-16283	
Minimech self-deploying boom mechanism			
[NASA-CASE-GSC-10566-1]	c15	N72-16477	
Heated porous plug microthruster			
[NASA-CASE-GSC-10640-1]	c28	N72-18766	
Optimum performance spacecraft solar cell system			
[NASA-CASE-GSC-10669-1]	c03	N72-20031	
Monostable multivibrator			
[NASA-CASE-GSC-10082-1]	c10	N72-20221	
Roll alignment detector			
[NASA-CASE-GSC-10514-1]	c14	N72-20379	
Cosmic dust sensor			
[NASA-CASE-GSC-10503-1]	c14	N72-20381	
Solenoid valve including guide for armature and valve member			
[NASA-CASE-GSC-10607-1]	c15	N72-20442	
Fast response low power drain logic circuits			
[NASA-CASE-GSC-10878-1]	c10	N72-22236	
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Electric field measuring and display system [NASA-CASE-KSC-10731-1]	c33 N74-27862	Electromagnetic mirror drive system [NASA-CASE-XLA-03724]	c14 N69-27461
Digital servo controller [NASA-CASE-KSC-10769-1]	c33 N74-29556	Evaporant holder [NASA-CASE-XLA-03105]	c15 N69-27483
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Dual digital video switcher [NASA-CASE-KSC-10782-1]	c33 N75-30431	Aeroflexible structures [NASA-CASE-XLA-06095]	c01 N69-39981
Compact-bi-phase pulse coded modulation decoder [NASA-CASE-KSC-10834-1]	c33 N76-14371	Transient-compensated SCR inverter [NASA-CASE-XLA-08507]	c09 N69-39984
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Microcomputerized electric field meter diagnostic and calibration system [NASA-CASE-KSC-11035-1]	c35 N78-28411	Motion picture camera for optical pyrometry Patent [NASA-CASE-XLA-00062]	c14 N70-33254
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Fiber optic crossbar switch for automatically patching optical signals [NASA-CASE-KSC-11104-1]	c74 N81-12862	Jet aircraft configuration Patent [NASA-CASE-XLA-00087]	c02 N70-33332
Fire extinguishing apparatus having a slidable mass for a penetrator nozzle [NASA-CASE-KSC-11064-1]	c31 N81-14137	Aerial capsule emergency separation device Patent [NASA-CASE-XLA-00115]	c03 N70-33343
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Common data buffer system [NASA-CASE-KSC-11048-1]	c62 N81-24779	Flexible foam erectable space structures Patent [NASA-CASE-XLA-00686]	c31 N70-34135
System and method for refurbishing and processing parachutes [NASA-CASE-KSC-11042-2]	c02 N81-26073	Nose gear steering system for vehicle with main skids Patent [NASA-CASE-XLA-01804]	c02 N70-34160
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		Dynamic precession damper for spin stabilized vehicles Patent [NASA-CASE-XLA-01989]	c21 N70-34295
		Erectable modular space station Patent [NASA-CASE-XLA-00678]	c31 N70-34296
		Electric-arc heater Patent [NASA-CASE-XLA-00330]	c33 N70-34540
		Ac power amplifier Patent Application [NASA-CASE-LAR-10218-1]	c09 N70-34559
		Method and apparatus for producing a plasma Patent [NASA-CASE-XLA-00147]	c25 N70-34661

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Logarithmic converter Patent [NASA-CASE-XLA-00471]	c08 N70-34778	Flexible wing deployment device Patent [NASA-CASE-XLA-01220]	c02 N70-41863
Mandrel for shaping solid propellant rocket fuel into a motor casing Patent [NASA-CASE-XLA-00304]	c27 N70-34783	Self-sealing, unbonded, rocket motor nozzle closure Patent [NASA-CASE-XLA-02651]	c28 N70-41967
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Accelerometer with FM output Patent [NASA-CASE-XLA-00492]	c14 N70-34799	Techniques for insulating cryogenic fuel containers Patent [NASA-CASE-XLA-01967]	c31 N70-42015
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		Quick release connector Patent [NASA-CASE-XLA-01141]	c15 N71-13789
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[NASA-CASE-XLA-03374]	c25 N71-15562	Dosimeter for high levels of absorbed radiation Patent	
Adjustable attitude guide device. Patent		[NASA-CASE-XLA-03645]	c14 N71-20430
[NASA-CASE-XLA-07911]	c15 N71-15571	Flow field simulation Patent	
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[NASA-CASE-XLA-01163]	c21 N71-15582	Variable pulse width multiplier Patent	
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[NASA-CASE-XLA-01926]	c14 N71-15620	Means for measuring the electron density gradients of the plasma sheath formed around a space vehicle Patent	
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[NASA-CASE-XLA-01332]	c31 N71-15664	Event recorder Patent	
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[NASA-CASE-XLA-03691]	c31 N71-15674	Inflatable support structure Patent	
Payload/burned-out motor case separation system Patent		[NASA-CASE-XLA-01731]	c32 N71-21045
[NASA-CASE-XLA-05369]	c31 N71-15687	Fast opening diaphragm Patent	
Velocity package Patent		[NASA-CASE-XLA-03660]	c15 N71-21060
[NASA-CASE-XLA-01339]	c31 N71-15692	Ellipsograph for pantograph Patent	
File card marker Patent		[NASA-CASE-XLA-03102]	c14 N71-21079
[NASA-CASE-XLA-02705]	c08 N71-15908	Random function tracer Patent	
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[NASA-CASE-XLA-00378]	c11 N71-15925	Method and apparatus for bonding a plastics sleeve onto a metallic body Patent	
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[NASA-CASE-XLA-00939]	c11 N71-15926	Hypersonic test facility Patent	
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[NASA-CASE-XLA-01787]	c11 N71-16028	Multilegged support system Patent	
Method of coating carbonaceous base to prevent oxidation destruction and coated base Patent		[NASA-CASE-XLA-01326]	c11 N71-21481
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Method of coating carbonaceous base to prevent oxidation destruction and coated base Patent		[NASA-CASE-XLA-10450]	c28 N71-21493
[NASA-CASE-XLA-00302]	c15 N71-16077	Canister closing device Patent	
Separator Patent		[NASA-CASE-XLA-01446]	c15 N71-21528
[NASA-CASE-XLA-00415]	c15 N71-16079	Ablation sensor Patent	
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[NASA-CASE-XLA-05881]	c31 N71-16085	Self-repeating plasma generator having communicating annular and linear arc discharge passages Patent	
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[NASA-CASE-XLA-10317-1]	c32 N71-16103	Attitude control and damping system for spacecraft Patent	
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[NASA-CASE-XLA-04605]	c32 N71-16106	Method of making inflatable honeycomb Patent	
Detector panels-micrometeoroid impact Patent		[NASA-CASE-XLA-03492]	c15 N71-22713
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Wind velocity probing device and method Patent		[NASA-CASE-XLA-00934]	c14 N71-22765
[NASA-CASE-XLA-02081]	c20 N71-16281	Thermal control wall panel Patent	
Vibrating structure displacement measuring instrument Patent		[NASA-CASE-XLA-01243]	c33 N71-22792
[NASA-CASE-XLA-03135]	c32 N71-16428	Attitude sensor for space vehicles Patent	
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[NASA-CASE-XLA-02079]	c12 N71-16894	Omnidirectional microwave spacecraft antenna Patent	
Leak Detector Patent		[NASA-CASE-XLA-03114]	c09 N71-22888
[NASA-CASE-XLA-10323-1]	c12 N71-17573	Thermal control panel Patent	
Logic AND gate for fluid circuits Patent		[NASA-CASE-XLA-07728]	c33 N71-22890
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Cable arrangement for rigid tethering Patent		[NASA-CASE-XLA-03132]	c31 N71-22969
[NASA-CASE-XLA-02332]	c32 N71-17609	Semi-linear ball bearing Patent	
Thermal pump-compressor for space use Patent		[NASA-CASE-XLA-02809]	c15 N71-22982
[NASA-CASE-XLA-00377]	c33 N71-17610	Heat sensing instrument Patent	
Viscous pendulum damper Patent		[NASA-CASE-XLA-01551]	c14 N71-22989
[NASA-CASE-XLA-10274-1]	c14 N71-17626	Ablation sensor Patent	
Self supporting space vehicle Patent		[NASA-CASE-XLA-01791]	c14 N71-22991
[NASA-CASE-XLA-00117]	c31 N71-17680	Self-calibrating displacement transducer Patent	
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[NASA-CASE-XLA-00937]	c31 N71-17691	Lateral displacement system for separated rocket stages Patent	
Hydraulic grip Patent		[NASA-CASE-XLA-04804]	c31 N71-23008
[NASA-CASE-XLA-05100]	c15 N71-17696	Thermal control coating Patent	
Heat protection apparatus Patent		[NASA-CASE-XLA-01995]	c18 N71-23047
[NASA-CASE-XLA-00892]	c33 N71-17897	Method of making an inflatable panel Patent	
Thermopile vacuum gage tube simulator Patent		[NASA-CASE-XLA-03497]	c15 N71-23052
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[NASA-CASE-XLA-07424]	c14 N71-18482	Impact energy absorber Patent	
Safe-arm initiator Patent		[NASA-CASE-XLA-01530]	c14 N71-23092
[NASA-CASE-XLA-10372]	c09 N71-18599	Micrometeoroid penetration measuring device Patent	
Controlled glass bead peening Patent		[NASA-CASE-XLA-00941]	c14 N71-23240
[NASA-CASE-XLA-07390]	c15 N71-18616	Combined optical attitude and altitude indicating instrument Patent	
Exclusive-Or digital logic module Patent		[NASA-CASE-XLA-01907]	c14 N71-23268
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Solar sensor having coarse and fine sensing with matched preirradiated cells and method of selecting cells Patent
[NASA-CASE-XLA-01584] c14 N71-23269

Variable width pulse integrator Patent
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Leading edge curvature based on convective heating Patent
[NASA-CASE-XLA-01486] c01 N71-23497

Measurement of time differences between luminous events Patent
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Method for measuring the characteristics of a gas Patent
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[NASA-CASE-XLA-02059] c33 N71-24276

Ring wing tension vehicle Patent
[NASA-CASE-XLA-04901] c31 N71-24315

Process for applying black coating to metals Patent
[NASA-CASE-XLA-06199] c15 N71-24875

Velocity limiting safety system Patent
[NASA-CASE-XLA-07473] c15 N71-24895

Strain coupled servo control system Patent
[NASA-CASE-XLA-08530] c32 N71-25360

Method of temperature compensating semiconductor strain gages Patent
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Method for improving the signal-to-noise ratio of the Wheatstone bridge type bolometer Patent
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Method of plating copper on aluminum Patent
[NASA-CASE-XLA-08966-1] c17 N71-25903

Laser calibrator Patent
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Thermal protection ablation spray system Patent
[NASA-CASE-XLA-04251] c18 N71-26100

Direct lift control system Patent
[NASA-CASE-LAR-10249-1] c02 N71-26110

Light shield and infrared reflector for fatigue testing Patent
[NASA-CASE-XLA-01782] c14 N71-26136

Dual resonant cavity absorption cell Patent
[NASA-CASE-LAR-10305] c14 N71-26137

Resilience testing device Patent
[NASA-CASE-XLA-08254] c14 N71-26161

Precipitation detector Patent
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Instrument for measuring the dynamic behavior of liquids Patent
[NASA-CASE-XLA-05541] c12 N71-26387

Arbitrarily shaped model survey system Patent
[NASA-CASE-LAR-10098] c32 N71-26681

Dielectric molding apparatus Patent
[NASA-CASE-LAR-10121-1] c15 N71-26721

Method of making a solid propellant rocket motor Patent
[NASA-CASE-XLA-04126] c28 N71-26779

Dynamic vibration absorber Patent
[NASA-CASE-LAR-10083-1] c15 N71-27006

Rate augmented digital to analog converter Patent
[NASA-CASE-XLA-07828] c08 N71-27057

High speed flight vehicle control Patent
[NASA-CASE-XLA-08967] c02 N71-27088

Suspended mass impact damper Patent
[NASA-CASE-LAR-10193-1] c15 N71-27146

Active vibration isolator for flexible bodies Patent
[NASA-CASE-LAR-10106-1] c15 N71-27169

Soldering device Patent
[NASA-CASE-XLA-08911] c15 N71-27214

Fringe counter for interferometers Patent
[NASA-CASE-LAR-10204] c14 N71-27215

Wideband VCO with high phase stability Patent
[NASA-CASE-XLA-03893] c10 N71-27271

Plural position switch status and operativeness checker Patent
[NASA-CASE-XLA-08799] c10 N71-27272

Angular displacement indicating gas bearing support system Patent
[NASA-CASE-XLA-09346] c15 N71-26740

Solid state thermal control polymer coating Patent
[NASA-CASE-XLA-01745] c33 N71-28903

Specialized halogen generator for purification of water Patent
[NASA-CASE-XLA-08913] c14 N71-28933

Optical communications system Patent
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Analog to digital converter tester Patent
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Method of making pressurized panel Patent
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Maksutov spectrograph Patent
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Two component bearing Patent
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Digital pulse width selection circuit Patent
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Magnetically controlled plasma accelerator Patent
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Boring bar drive mechanism Patent
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Wind tunnel model damper Patent
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Flared tube strainer
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Technique of duplicating fragile core
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Extensometer frame
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Split range transducer
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Recorder using selective noise filter
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Stacked array of omnidirectional antennas
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Pressure operated electrical switch responsive to a pressure decrease after a pressure increase
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Magnifying scratch gage force transducer
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Star image motion compensator
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Absolute focus lock for microscopes
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Cryogenic feedthrough
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Method and apparatus for mapping the sensitivity of the face of a photodetector specifically a PMT
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Omnidirectional slot antenna for mounting on cylindrical space vehicle
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Volumetric direct nuclear pumped laser [NASA-CASE-LAR-12183-1]	c36 N79-16307		
Wind tunnel [NASA-CASE-LAR-10135-1]	c09 N79-21083		

[NASA-CASE-LAR-12705-1]	c33 N80-24549	Wingtip vortex turbine	
Heating and cooling system		[NASA-CASE-LAR-12544-1]	c07 N81-27096
[NASA-CASE-LAR-12393-1]	c39 N80-25693	A self-correcting electronically scanned pressure sensor	
Frequency tracked pulse technique for ultrasonic analysis		[NASA-CASE-LAR-12686-1]	c09 N81-27121
[NASA-CASE-LAR-12697-1]	c32 N80-26571	Telescoping columns	
Chromatically corrected virtual image visual display		[NASA-CASE-LAR-12195-1]	c31 N81-27324
[NASA-CASE-LAR-12251-1]	c74 N80-27185	Helmet weight simulator	
Heat treat fixture and method of heat treating		[NASA-CASE-LAR-12320-1]	c54 N81-27806
[NASA-CASE-LAR-11821-1]	c26 N80-28492	Indirect microbial detection	
Photocapacitive image converter		[NASA-CASE-LAR-12520-1]	c51 N81-28698
[NASA-CASE-LAR-12513-1]	c33 N80-28635	Explosively activated egress area	
Dual acting slit control mechanism		[NASA-CASE-LAR-12624-1]	c03 N81-29107
[NASA-CASE-LAR-11370-1]	c35 N80-28686	A rectangular rod-wall sound shield	
Visible and infrared polarization ratio spectroradiometer		[NASA-CASE-LAR-12883-1]	c09 N81-29138
[NASA-CASE-LAR-12285-1]	c35 N80-28687	Rim inertial measuring system	
Collapsible corrugated horn antenna		[NASA-CASE-LAR-12052-1]	c18 N81-29152
[NASA-CASE-LAR-11745-1]	c32 N80-29539	Tackifier for addition polyimides containing monoethylphthalate	
Natural turbulence electrical power generator		[NASA-CASE-LAR-12642-1]	c27 N81-29229
[NASA-CASE-LAR-11551-1]	c44 N80-29834	Automated syringe sampler	
Digital demodulator		[NASA-CASE-LAR-12308-1]	c35 N81-29407
[NASA-CASE-LAR-12659-1]	c33 N80-31731	Apparatus and process for microbial detection and enumeration	
Film advance indicator		[NASA-CASE-LAR-12709-1]	c51 N81-29727
[NASA-CASE-LAR-12474-1]	c35 N80-31774	Low X-ray absorption aneurism clips	
Process for preparing high temperature polyimide film laminates		[NASA-CASE-LAR-12650-1]	c52 N81-29768
[NASA-CASE-LAR-12742-1]	c24 N81-12174	Aeroelastic instability stoppers for wind-tunnel models	
Heat pipe honeycomb panel		[NASA-CASE-LAR-12720-1]	c09 N81-31229
[NASA-CASE-LAR-12637-1]	c34 N81-12362	Aeroelastic instability stoppers for wind-tunnel models	
Miniature spectrally selective dosimeter		[NASA-CASE-LAR-12458-1]	c09 N81-31230
[NASA-CASE-LAR-12469-1]	c35 N81-12388	Unequal split microwave power divider	
Pyroelectric detector arrays		[NASA-CASE-LAR-12889-1]	c33 N81-31483
[NASA-CASE-LAR-12363-1]	c35 N81-12389	An instrument for determining coincidence and elapse time between independent sources of random sequential events	
Hot foil transducer skin friction sensor		[NASA-CASE-LAR-12531-1]	c35 N81-31529
[NASA-CASE-LAR-12321-1]	c35 N81-12390	Universal connectors for joining stringers	
Modified spiral wound retaining ring		[NASA-CASE-LAR-12744-1]	c37 N81-31551
[NASA-CASE-LAR-12361-1]	c37 N81-12422	Ride quality meter	
Acoustic tooth cleaner		[NASA-CASE-LAR-12882-1]	c54 N81-31848
[NASA-CASE-LAR-12471-1]	c52 N81-12724	Solar powered aircraft	
Partial interlaminar separation system for composites		[NASA-CASE-LAR-12615-1]	c05 N81-32138
[NASA-CASE-LAR-12065-1]	c24 N81-14000	Solar driven liquid metal MHD power generator	
Method for preparing addition type polyimide prepreps		[NASA-CASE-LAR-12495-1]	c44 N81-32609
[NASA-CASE-LAR-12054-2]	c27 N81-14078	Propulsive lateral control nozzle	
Method and tool for machining a transverse slot about a bore		[NASA-CASE-LAR-12136-1]	c08 N81-33210
[NASA-CASE-LAR-11855-1]	c37 N81-14319	Method of making a partial interlaminar separation composite system	
Aerodynamic side-force alleviator means		[NASA-CASE-LAR-12065-2]	c24 N81-33235
[NASA-CASE-LAR-12326-1]	c02 N81-14968	NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.	
Thermoset-thermoplastic aromatic polyamides		LEWIS RESEARCH CENTER, CLEVELAND, OHIO.	
[NASA-CASE-LAR-12723-1]	c27 N81-15107	Poal seal	
Pulsed phase locked loop strain monitor		[NASA-CASE-XLR-05130]	c15 N69-21362
[NASA-CASE-LAR-12772-1]	c33 N81-15195	Fluid jet amplifier	
Leading edge vortex flaps for drag reduction		[NASA-CASE-XLE-03512]	c12 N69-21466
[NASA-CASE-LAR-12750-1]	c02 N81-15016	Electrode and insulator with shielded dielectric junction	
Compensating linkage for main rotor control		[NASA-CASE-XLE-03778]	c09 N69-21542
[NASA-CASE-LAR-11797-1]	c05 N81-19087	Thin window, drifted silicon, charged particle detector	
Thrust augmented spin recovery device		[NASA-CASE-XLE-10529]	c14 N69-23191
[NASA-CASE-LAR-11970-2]	c08 N81-19130	Probes having ring and primary sensor at same potential to prevent collection of stray wall currents in ionized gases	
A low energy electron magnetometer		[NASA-CASE-XLE-00690]	c25 N69-39884
[NASA-CASE-LAR-12706-1]	c35 N81-19428	Ion thruster cathode	
Fixture for environmental exposure of structural materials under compression		[NASA-CASE-XLE-07087]	c06 N69-39889
[NASA-CASE-LAR-12602-1]	c35 N81-19429	Superconducting alternator	
Velocity vector control system augmented with direct lift control		[NASA-CASE-XLE-02824]	c03 N69-39890
[NASA-CASE-LAR-12268-1]	c08 N81-24106	Triode thermionic energy converter	
Direction sensitive laser velocimeter		[NASA-CASE-XLE-01015]	c03 N69-39898
[NASA-CASE-LAR-12177-1]	c36 N81-24422	Slug flow magnetohydrodynamic generator	
Tire/wheel concept		[NASA-CASE-XLE-02083]	c03 N69-39983
[NASA-CASE-LAR-11695-2]	c37 N81-24443	Reduced gravity liquid configuration simulator	
Heat pipe cooled probe		[NASA-CASE-XLE-02624]	c12 N69-39988
[NASA-CASE-LAR-12588-1]	c44 N81-24525	Transpiration cooled turbine blade manufactured from wires Patent	
Lightweight structural columns		[NASA-CASE-XLE-00020]	c15 N70-33226
[NASA-CASE-LAR-12095-1]	c31 N81-25258	Rocket propellant injector Patent	
Foldable beam		[NASA-CASE-XLE-00103]	c28 N70-33241
[NASA-CASE-LAR-12077-1]	c31 N81-25259	Modification and improvements to cooled blades Patent	
Cooling system for high speed aircraft		[NASA-CASE-XLE-00092]	c15 N70-33264
[NASA-CASE-LAR-12406-1]	c05 N81-26114	Colloid propulsion method and apparatus Patent	
Pitch attitude stabilization system utilizing engine pressure ratio feedback signals		[NASA-CASE-XLE-00817]	c28 N70-33265
[NASA-CASE-LAR-12562-1]	c08 N81-26152		
Orbiter/launch system			
[NASA-CASE-LAR-12250-1]	c14 N81-26161		
Adaptive polarization separation			
[NASA-CASE-LAR-12196-1]	c33 N81-26358		

High-vacuum condenser tank for ion rocket tests
Patent
[NASA-CASE-XLE-00168] c11 N70-33278

High temperature nickel-base alloy Patent
[NASA-CASE-XLE-00151] c17 N70-33283

Annular rocket motor and nozzle configuration
Patent
[NASA-CASE-XLE-00078] c28 N70-33284

Reinforced metallic composites Patent
[NASA-CASE-XLE-02428] c17 N70-33288

Process for applying a protective coating for
salt bath brazing Patent
[NASA-CASE-XLE-00046] c15 N70-33311

Wire grid forming apparatus Patent
[NASA-CASE-XLE-00023] c15 N70-33330

Electro-thermal rocket Patent
[NASA-CASE-XLE-00267] c28 N70-33356

External liquid-spray cooling of turbine blades
Patent
[NASA-CASE-XLE-00037] c28 N70-33372

Apparatus for igniting solid propellants Patent
[NASA-CASE-XLE-00207] c28 N70-33375

Flexible seal for valves Patent
[NASA-CASE-XLE-00101] c15 N70-33376

Apparatus for making a metal slurry product Patent
[NASA-CASE-XLE-00010] c15 N70-33382

Energy conversion apparatus Patent
[NASA-CASE-XLE-00212] c03 N70-34134

Enthalpy and stagnation temperature
determination of a high temperature laminar
flow gas stream Patent
[NASA-CASE-XLE-00266] c14 N70-34156

Electrothermal rockets having improved heat
exchangers Patent
[NASA-CASE-XLE-01783] c28 N70-34175

Venting vapor apparatus Patent
[NASA-CASE-XLE-00288] c15 N70-34247

Thrust vector control apparatus Patent
[NASA-CASE-XLE-00208] c28 N70-34294

High temperature heat source Patent
[NASA-CASE-XLE-00490] c33 N70-34545

Inlet deflector for jet engines Patent
[NASA-CASE-XLE-00388] c28 N70-34788

Radiant heater having formed filaments Patent
[NASA-CASE-XLE-00387] c33 N70-34812

Optical torqueometer Patent
[NASA-CASE-XLE-00503] c14 N70-34818

Electric propulsion engine test chamber Patent
[NASA-CASE-XLE-00252] c11 N70-34844

Conical valve plug Patent
[NASA-CASE-XLE-00715] c15 N70-34859

Channel-type shell construction for rocket
engines and the like Patent
[NASA-CASE-XLE-00144] c28 N70-34860

Non-reusable kinetic energy absorber Patent
[NASA-CASE-XLE-00810] c15 N70-34861

High temperature testing apparatus Patent
[NASA-CASE-XLE-00335] c14 N70-35368

Ion thruster cathode Patent Application
[NASA-CASE-XLE-10814-1] c28 N70-35422

Formed metal ribbon wrap Patent
[NASA-CASE-XLE-00164] c15 N70-36411

Multi-stage multiple-reentry turbine
Patent
[NASA-CASE-XLE-00170] c15 N70-36412

Fluid coupling Patent
[NASA-CASE-XLE-00397] c15 N70-36492

Injector-valve device Patent
[NASA-CASE-XLE-00303] c15 N70-36535

Nickel-base alloy Patent
[NASA-CASE-XLE-00283] c17 N70-36616

Apparatus having coaxial capacitor structure for
measuring fluid density Patent
[NASA-CASE-XLE-00143] c14 N70-36618

Rocket thrust chamber Patent
[NASA-CASE-XLE-00145] c28 N70-36806

Ion rocket Patent
[NASA-CASE-XLE-00376] c28 N70-37245

Annular supersonic decelerator or drogue
Patent
[NASA-CASE-XLE-00222] c02 N70-37939

Rocket engine Patent
[NASA-CASE-XLE-00342] c28 N70-37980

Variable sweep aircraft wing Patent
[NASA-CASE-XLE-00350] c02 N70-38011

Apparatus for transferring cryogenic liquids
Patent
[NASA-CASE-XLE-00345] c15 N70-38020

Method of producing porous tungsten ionizers for
ion rocket engines Patent
[NASA-CASE-XLE-00455] c28 N70-38197

Method of making fiber reinforced metallic
composites Patent
[NASA-CASE-XLE-00231] c17 N70-38198

Rocket engine injector Patent
[NASA-CASE-XLE-00111] c28 N70-38199

Reinforced metallic composites Patent
[NASA-CASE-XLE-00228] c17 N70-38490

Rocket motor system Patent
[NASA-CASE-XLE-00323] c28 N70-38505

Particle beam measurement apparatus using beam
kinetic energy to change the heat sensitive
resistance of the detection probe Patent
[NASA-CASE-XLE-00243] c14 N70-38602

Penshape exhaust nozzle for supersonic engine
Patent
[NASA-CASE-XLE-00057] c28 N70-38711

Multi-stage multiple-reentry turbine Patent
[NASA-CASE-XLE-00085] c28 N70-39895

Gas lubricant compositions Patent
[NASA-CASE-XLE-00353] c18 N70-39897

Telescoping-spike supersonic inlet for aircraft
engines Patent
[NASA-CASE-XLE-00005] c28 N70-39899

High temperature spark plug Patent
[NASA-CASE-XLE-00660] c28 N70-39925

Low viscosity magnetic fluid obtained by the
colloidal suspension of magnetic particles
Patent
[NASA-CASE-XLE-01512] c12 N70-40124

Apparatus for absorbing and measuring power Patent
[NASA-CASE-XLE-00720] c14 N70-40201

Device for directionally controlling
electromagnetic radiation Patent
[NASA-CASE-XLE-01716] c09 N70-40234

Method for continuous variation of propellant
flow and thrust in propulsive devices Patent
[NASA-CASE-XLE-00177] c28 N70-40367

Apparatus for increasing ion engine beam density
Patent
[NASA-CASE-XLE-00519] c28 N70-41576

Foldable conduit Patent
[NASA-CASE-XLE-00620] c32 N70-41579

Liquid storage tank venting device for zero
gravity environment Patent
[NASA-CASE-XLE-01449] c15 N70-41646

Method of making a regeneratively cooled
combustion chamber Patent
[NASA-CASE-XLE-00150] c28 N70-41818

Instrument for the quantitative measurement of
radiation at multiple wave lengths Patent
[NASA-CASE-XLE-00011] c14 N70-41946

Small rocket engine Patent
[NASA-CASE-XLE-00685] c28 N70-41992

Apparatus for positioning and loading a test
specimen Patent
[NASA-CASE-XLE-01300] c15 N70-41993

Liquid flow sight assembly Patent
[NASA-CASE-XLE-02998] c14 N70-42074

Inductive liquid level detection system Patent
[NASA-CASE-XLE-01609] c14 N71-10500

Method of forming thin window drifted silicon
charged particle detector Patent
[NASA-CASE-XLE-00808] c24 N71-10560

Electrostatic thruster with improved insulators
Patent
[NASA-CASE-XLE-01902] c28 N71-10574

Thin-walled pressure vessel Patent
[NASA-CASE-XLE-04677] c15 N71-10577

Method of making a silicon semiconductor device
Patent
[NASA-CASE-XLE-02792] c26 N71-10607

Metallic film diffusion for boundary lubrication
Patent
[NASA-CASE-XLE-01765] c18 N71-10772

Molecular beam velocity selector Patent
[NASA-CASE-XLE-01533] c11 N71-10777

Meteoroid sensing apparatus having a coincidence
network connected to a pair of capacitors
Patent
[NASA-CASE-XLE-01246] c14 N71-10797

Capacitor and method of making same Patent
[NASA-CASE-XLE-10364-1] c09 N71-13522

Capillary radiator Patent
[NASA-CASE-XLE-03307] c33 N71-14035

Electrostatic ion engine having a permanent
magnetic circuit Patent
[NASA-CASE-XLE-01124] c28 N71-14043

Split welding chamber Patent
[NASA-CASE-XLE-11531] c15 N71-14932

Method and apparatus for making curved reflectors Patent
[NASA-CASE-XLE-08917] c15 N71-15597

Method of making a diffusion bonded refractory coating Patent
[NASA-CASE-XLE-01604-2] c15 N71-15610

Black-body furnace Patent
[NASA-CASE-XLE-01399] c33 N71-15625

Method of igniting solid propellants Patent
[NASA-CASE-XLE-01988] c27 N71-15634

Fluid dispensing apparatus and method Patent
[NASA-CASE-XLE-01182] c27 N71-15635

Automatically deploying nozzle exit cone extension Patent
[NASA-CASE-XLE-01640] c31 N71-15637

High temperature cobalt-base alloy Patent
[NASA-CASE-XLE-00726] c17 N71-15644

Method of making a rocket motor casing Patent
[NASA-CASE-XLE-00409] c28 N71-15658

Rocket motor casing Patent
[NASA-CASE-XLE-05689] c28 N71-15659

Electrostatic ion rocket engine Patent
[NASA-CASE-XLE-02066] c28 N71-15661

High temperature cobalt-base alloy Patent
[NASA-CASE-XLE-02991] c17 N71-16025

Nickel-base alloy containing Mo-W-Al-Cr-Ta-Zr-C-Nb-B Patent
[NASA-CASE-XLE-02082] c17 N71-16026

Method of improving the reliability of a rolling element system Patent
[NASA-CASE-XLE-02999] c15 N71-16052

Process of casting heavy slips Patent
[NASA-CASE-XLE-00106] c15 N71-16076

Boiler for generating high quality vapor Patent
[NASA-CASE-XLE-00785] c33 N71-16104

Method of making self lubricating fluoride-metal composite materials Patent
[NASA-CASE-XLE-08511-2] c18 N71-16105

Thrust and direction control apparatus Patent
[NASA-CASE-XLE-03583] c31 N71-17629

Linear magnetic brake with two windings Patent
[NASA-CASE-XLE-05079] c15 N71-17652

Method of lubricating rolling element bearings Patent
[NASA-CASE-XLE-09527] c15 N71-17688

Hot wire liquid level detector for cryogenic fluids Patent
[NASA-CASE-XLE-00454] c23 N71-17802

Pulsed differential comparator circuit Patent
[NASA-CASE-XLE-03804] c10 N71-15471

Foil seal Patent
[NASA-CASE-XLE-05130-2] c15 N71-19570

Generator for a space power system Patent
[NASA-CASE-XLE-04250] c09 N71-20446

Method of making electrical contact on silicon solar cell and resultant product Patent
[NASA-CASE-XLE-04787] c03 N71-20492

Small plasma probe Patent
[NASA-CASE-XLE-02578] c25 N71-20747

Combined electrolysis device and fuel cell and method of operation Patent
[NASA-CASE-XLE-01645] c03 N71-26904

Pressure monitoring with a plurality of ionization gauges controlled at a central location Patent
[NASA-CASE-XLE-00787] c14 N71-21090

Control of transverse instability in rocket combustors Patent
[NASA-CASE-XLE-04603] c33 N71-21507

High voltage divider system Patent
[NASA-CASE-XLE-02008] c09 N71-21583

Plasma device feed system Patent
[NASA-CASE-XLE-02902] c25 N71-21694

Burning rate control of solid propellants Patent
[NASA-CASE-XLE-03494] c27 N71-21819

Protective device for machine and metalworking tools Patent
[NASA-CASE-XLE-01092] c15 N71-22797

Cryogenic insulation system Patent
[NASA-CASE-XLE-04222] c23 N71-22881

Method for producing fiber reinforced metallic composites Patent
[NASA-CASE-XLE-03925] c18 N71-22894

Thermal shock apparatus Patent
[NASA-CASE-XLE-02024] c14 N71-22964

Arc electrode of graphite with ball tip Patent
[NASA-CASE-XLE-04788] c09 N71-22987

Gas purged dry box glove Patent
[NASA-CASE-XLE-02531] c05 N71-23080

Automatic recording McLeod gauge Patent
[NASA-CASE-XLE-03280] c14 N71-23093

Electronic cathode having a brush-like structure and a relatively thick oxide emissive coating Patent
[NASA-CASE-XLE-04501] c09 N71-23190

High temperature ferromagnetic cobalt-base alloy Patent
[NASA-CASE-XLE-03629] c17 N71-23248

Induction furnace with perforated tungsten foil shielding Patent
[NASA-CASE-XLE-04026] c14 N71-23267

Gd or Sm doped silicon semiconductor composition Patent
[NASA-CASE-XLE-10715] c26 N71-23292

Protection of serially connected solar cells against open circuits by the use of shunting diode Patent
[NASA-CASE-XLE-04535] c03 N71-23354

Superconducting alternator Patent
[NASA-CASE-XLE-02823] c09 N71-23443

Silicon solar cell with cover glass bonded to cell by metal pattern Patent
[NASA-CASE-XLE-08569] c03 N71-23449

Analytical test apparatus and method for determining oxide content of alkali metal Patent
[NASA-CASE-XLE-01997] c06 N71-23527

Thermionic converter with current augmented by self induced magnetic field Patent
[NASA-CASE-XLE-01903] c22 N71-23599

Semiconductor material and method of making same Patent
[NASA-CASE-XLE-02798] c26 N71-23654

Insulation system Patent
[NASA-CASE-XLE-02647] c18 N71-23658

Self-lubricating fluoride metal composite materials Patent
[NASA-CASE-XLE-08511] c18 N71-23710

Alloys for bearings Patent
[NASA-CASE-XLE-05033] c15 N71-23810

Extrusion die for refractory metals Patent
[NASA-CASE-XLE-06773] c15 N71-23817

Combustion chamber Patent
[NASA-CASE-XLE-04857] c28 N71-23968

Metallic film diffusion for boundary lubrication Patent
[NASA-CASE-XLE-10337] c15 N71-24046

Process for producing dispersion strengthened nickel with aluminum Patent
[NASA-CASE-XLE-06969] c17 N71-24142

Thermal radiation shielding Patent
[NASA-CASE-XLE-03432] c33 N71-24145

Method of attaching a cover glass to a silicon solar cell Patent
[NASA-CASE-XLE-08569-2] c03 N71-24681

Rocket engine injector Patent
[NASA-CASE-XLE-03157] c28 N71-24736

Multialarm summary alarm Patent
[NASA-CASE-XLE-03061-1] c10 N71-24798

Apparatus for making curved reflectors Patent
[NASA-CASE-XLE-08917-2] c15 N71-24836

Flow angle sensor and read out system Patent
[NASA-CASE-XLE-04503] c14 N71-24864

Shock tube powder dispersing apparatus Patent
[NASA-CASE-XLE-04946] c17 N71-24911

Pneumatic oscillator Patent
[NASA-CASE-XLE-10345-1] c10 N71-25899

Heat activated cell with alkali anode and alkali salt electrolyte Patent
[NASA-CASE-XLE-11358] c03 N71-26084

Method of producing refractory composites containing tantalum carbide, hafnium carbide, and hafnium boride Patent
[NASA-CASE-XLE-03940] c18 N71-26153

Ion beam deflector Patent
[NASA-CASE-XLE-10689-1] c28 N71-26173

Rolling element bearings Patent
[NASA-CASE-XLE-09527-2] c15 N71-26189

Ion thruster accelerator system Patent
[NASA-CASE-XLE-10106-1] c28 N71-26642

Propellant feed isolator Patent
[NASA-CASE-XLE-10210-1] c28 N71-26781

Heat activated cell Patent
[NASA-CASE-XLE-11359] c03 N71-28579

Process for glass coating an ion accelerator grid Patent
[NASA-CASE-XLE-10278-1] c15 N71-28582

Fluid jet amplifier Patent
[NASA-CASE-XLE-09341] c12 N71-28741

Gas core nuclear reactor Patent [NASA-CASE-LEW-10250-1]	c22 N71-28759	Gas turbine engine fuel control [NASA-CASE-LEW-11187-1]	c28 N73-19793
Gas turbine combustor Patent [NASA-CASE-LEW-10286-1]	c28 N71-28915	Thermocouple tape [NASA-CASE-LEW-11072-1]	c14 N73-24472
Cyclic switch Patent [NASA-CASE-LEW-10155-1]	c09 N71-29035	Method and apparatus for sputtering utilizing an apertured electrode and a pulsed substrate bias [NASA-CASE-LEW-10920-1]	c17 N73-24569
Temperature reducing coating for metals subject to flame exposure Patent [NASA-CASE-XLE-00035]	c33 N71-29151	Magneto-plasma-dynamic arc thruster [NASA-CASE-LEW-11180-1]	c25 N73-25760
Liquid spray cooling method Patent [NASA-CASE-XLE-00027]	c33 N71-29152	Ablative system [NASA-CASE-LEW-10359-2]	c33 N73-25952
Turbo-machine blade vibration damper Patent [NASA-CASE-XLE-00155]	c28 N71-29154	Parasitic suppressing circuit [NASA-CASE-ERC-10403-1]	c10 N73-26228
Corrosion resistant beryllium Patent [NASA-CASE-LEW-10327]	c17 N71-33408	Twisted multifilament superconductor [NASA-CASE-LEW-11726-1]	c26 N73-26752
Integrated thermoelectric generator/space antenna combination [NASA-CASE-XER-09521]	c09 N72-12136	Ophthalmic method and apparatus [NASA-CASE-LEW-11669-1]	c05 N73-27062
Sensing probe [NASA-CASE-LEW-10281-1]	c14 N72-17327	Single grid accelerator for an ion thruster [NASA-CASE-XLE-10453-2]	c28 N73-27699
Method of making enf cell [NASA-CASE-LEW-11359-2]	c03 N72-20034	Preparation of polyimides from mixtures of monomeric diamines and esters of polycarboxylic acids [NASA-CASE-LEW-11325-1]	c06 N73-27980
Gaseous control system for nuclear reactors [NASA-CASE-XLE-04599]	c22 N72-20597	Method and apparatus for measuring electromagnetic radiation [NASA-CASE-LEW-11159-1]	c14 N73-28488
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[NASA-CASE-XMF-06065] c15 N71-26395

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RC rate generator for slow speed measurement Patent
[NASA-CASE-XMF-02966] c10 N71-24863

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Conductive elastomeric extensometer [NASA-CASE-MFS-21049-1]	c52 N74-27864	Isolated output system for a class D switching-mode amplifier [NASA-CASE-MFS-21616-1]	c33 N75-30429
Device for measuring tensile forces [NASA-CASE-MFS-21728-1]	c35 N74-27865	Solar energy power system [NASA-CASE-MFS-21628-1]	c44 N75-32581
Three mirror glancing incidence system for X-ray telescope [NASA-CASE-MFS-21372-1]	c74 N74-27866	System for enhancing tool-exchange capabilities of a portable wrench [NASA-CASE-MFS-22283-1]	c37 N75-33395
Flame detector operable in presence of proton radiation [NASA-CASE-MFS-21577-1]	c19 N74-29410	Externally supported internally stabilized flexible duct joint [NASA-CASE-MFS-19194-1]	c37 N76-14460
Integrated P-channel MOS gyator [NASA-CASE-MFS-22343-1]	c33 N74-34638	Quick disconnect filter coupling [NASA-CASE-MFS-22323-1]	c37 N76-14463
System for depositing thin films [NASA-CASE-MFS-20775-1]	c31 N75-12161	Panel for selectively absorbing solar thermal energy and the method of producing said panel [NASA-CASE-MFS-22562-1]	c44 N76-14595
Ultrasonic bone densitometer [NASA-CASE-MFS-20994-1]	c35 N75-12271	Rapid activation and checkout device for batteries [NASA-CASE-MFS-22749-1]	c44 N76-14601
Strain gauge ambiguity sensor for segmented mirror active optical system [NASA-CASE-MFS-20506-1]	c35 N75-12273	Two stage light gas-plasma projectile accelerator [NASA-CASE-MFS-22287-1]	c75 N76-14931
Orthotic arm joint [NASA-CASE-MFS-21611-1]	c54 N75-12616	Polyimides of ether-linked aryl tetracarboxylic dianhydrides [NASA-CASE-MFS-22355-1]	c23 N76-15268
Automatically operable self-leveling load table [NASA-CASE-MFS-22039-1]	c09 N75-12968	Remotely operable articulated manipulator [NASA-CASE-MFS-22707-1]	c37 N76-15457
Phase-locked servo system [NASA-CASE-MFS-22073-1]	c33 N75-13139	Remote manipulator system [NASA-CASE-MFS-22022-1]	c37 N76-15460
Self-energized plasma compressor [NASA-CASE-MFS-22145-1]	c75 N75-13625	Thermoelectric power system [NASA-CASE-MFS-22002-1]	c44 N76-16612
Clear air turbulence detector [NASA-CASE-MFS-21244-1]	c36 N75-15028	Self-energized plasma compressor [NASA-CASE-MFS-22145-2]	c75 N76-17951
Variable frequency inverter for ac induction motors with torque, speed and braking control [NASA-CASE-MFS-22088-1]	c33 N75-15874	Device for measuring the ferrite content in an austenitic stainless-steel weld [NASA-CASE-MFS-22907-1]	c26 N76-18257
Leak detector [NASA-CASE-MFS-21761-1]	c35 N75-15931	Heat transfer device [NASA-CASE-MFS-22938-1]	c34 N76-18374
Ergometer calibrator [NASA-CASE-MFS-21045-1]	c35 N75-15932	Holographic motion picture camera with Doppler shift compensation [NASA-CASE-MFS-22517-1]	c35 N76-18402
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Meter for use in detecting tension in straps having predetermined elastic characteristics [NASA-CASE-MFS-22189-1]	c35 N75-19615	Mixing insert for foam dispensing apparatus [NASA-CASE-MFS-20607-1]	c37 N76-19436
Multiplate focusing collimator [NASA-CASE-MFS-20932-1]	c35 N75-19616	Traffic survey system [NASA-CASE-MFS-22631-1]	c66 N76-19888
Latching device [NASA-CASE-MFS-21606-1]	c37 N75-19685	Electronic optical transfer function analyzer [NASA-CASE-MFS-21672-1]	c74 N76-19935
Internally supported flexible duct joint [NASA-CASE-MFS-19193-1]	c37 N75-19686	System for imposing directional stability on a rocket-propelled vehicle [NASA-CASE-MFS-21311-1]	c20 N76-21275
Pseudo-noise test set for communication system evaluation [NASA-CASE-MFS-22671-1]	c35 N75-21582	Filtering device [NASA-CASE-MFS-22729-1]	c32 N76-21366
Device for use in loading tension members [NASA-CASE-MFS-21488-1]	c14 N75-24794	Translatory shock absorber for attitude sensors [NASA-CASE-MFS-22905-1]	c19 N76-22284
Holographic system for nondestructive testing [NASA-CASE-MFS-21704-1]	c35 N75-25124	Device for installing rocket engines [NASA-CASE-MFS-19220-1]	c20 N76-22296
Hole cutter [NASA-CASE-MFS-22649-1]	c37 N75-25186	Deployable flexible tunnel [NASA-CASE-MFS-22636-1]	c37 N76-22540
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Method of determining bond quality of power transistors attached to substrates [NASA-CASE-MFS-21931-1]	c37 N75-26372	Apparatus for reducing aerodynamic noise in a wind tunnel [NASA-CASE-MFS-23099-1]	c09 N76-23273
Anti-gravity device [NASA-CASE-MFS-22758-1]	c70 N75-26789	Charge injection method and apparatus of producing large area electrets [NASA-CASE-MFS-23186-1]	c33 N76-23483
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Brazing alloy composition [NASA-CASE-MFS-06053]	c26 N75-27126	Solar energy trap [NASA-CASE-MFS-22744-1]	c44 N76-24696
Refractory porcelain enamel passive control coating for high temperature alloys [NASA-CASE-MFS-22324-1]	c27 N75-27160	Failure detection and control means for improved drift performance of a gimbaled platform system [NASA-CASE-MFS-23551-1]	c04 N76-26175
Real time, large volume, moving scene holographic camera system [NASA-CASE-MFS-22537-1]	c35 N75-27328	Lead-oxygen dc power supply system having a closed loop oxygen and water system [NASA-CASE-MFS-23059-1]	c44 N76-27664
Method and apparatus for vibration analysis utilizing the Mossbauer effect [NASA-CASE-MFS-05882]	c35 N75-27329	Thermal energy storage system [NASA-CASE-MFS-23167-1]	c44 N76-31667
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Photovoltaic cell array [NASA-CASE-MFS-22458-1]	c44 N77-10635	Passive propellant system [NASA-CASE-MFS-23642-2]	c20 N78-27176
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Support assembly for cryogenically coolable low-noise choke waveguide
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Multibeam single frequency synthetic aperture radar processor for imaging separate range swaths
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Membrane consisting of polyquaternary amine ion exchange polymer network interpenetrating the chains of thermoplastic matrix polymer
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Frequency translating phase conjugation circuit for active retrodirective antenna array
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Method and apparatus for quadriphase-shift-key and linear phase modulation
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An electro-optical Doppler tracker means and method for optical correlation of synthetic aperture radar data
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Method of forming frozen spheres in a force-free drop tower
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Phase-angle controller for Stirling engines
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Double-beam optical method and apparatus for measuring thermal diffusivity and other molecular dynamic processes in utilizing the transient thermal lens effect
[NASA-CASE-NPO-14657-1] c74 N81-17887

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Elimination of current spikes in buck power converters
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Copper doped polycrystalline silicon solar cell
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[NASA-CASE-NPO-15264-1]	c04 N81-22036	NATIONAL AERONAUTICS AND SPACE ADMINISTRATION.	
Focal plane array optical proximity sensor		WESTERN OPERATIONS OFFICE, SANTA MONICA, CALIF.	
[NASA-CASE-NPO-15155-1]	c74 N81-22894	Automatic pump Patent	
Polymeric compositions and their method of manufacture		[NASA-CASE-XNP-04731]	c15 N71-24042
[NASA-CASE-NPO-10424-1]	c27 N81-24258	NATIONAL BUREAU OF STANDARDS, BOULDER, COLO.	
Low current linearization of magnetic amplifier for dc transducer		Densitometer Patent	
[NASA-CASE-NPO-14617-1]	c33 N81-24338	[NASA-CASE-XLE-00688]	c14 N70-41330
System for monitoring physical characteristics of fluids		NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION, BOULDER, COLO.	
[NASA-CASE-NPO-15400-1]	c34 N81-24384	Determining distance to lightning strokes from a single station	
Mobile sampler for use in acquiring samples of terrestrial atmospheric gasses		[NASA-CASE-KSC-10698]	c07 N73-20175
[NASA-CASE-NPO-15220-1]	c35 N81-24414	NATIONAL RESEARCH CORP., CAMBRIDGE, MASS.	
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[NASA-CASE-NPO-15211-1]	c36 N81-24425	[NASA-CASE-XGS-07752]	c14 N73-30390
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[NASA-CASE-NPO-15201-1]	c36 N81-24426	[NASA-CASE-XLA-05087]	c14 N73-30391
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[NASA-CASE-NPO-14588-1]	c32 N81-25278	[NASA-CASE-LAR-02743]	c14 N73-32324
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Sandblasting nozzle		Rock sampling	
[NASA-CASE-NPO-13823-1]	c37 N81-25371	[NASA-CASE-XNP-09755]	c46 N74-23069
Photomechanical transducer		NATIONAL SCIENCE FOUNDATION, WASHINGTON, D. C.	
[NASA-CASE-NPO-14363-1]	c39 N81-25400	Laser apparatus	
Underground mineral extraction		[NASA-CASE-GSC-12237-1]	c36 N80-14384
[NASA-CASE-NPO-14140-1]	c43 N81-26509	NEW ENGLAND MEDICAL CENTER HOSPITALS, BOSTON, MASS.	
Schottky barrier cell and method of fabricating it		Determination of antimicrobial susceptibilities on infected urines without isolation	
[NASA-CASE-NPO-13689-4]	c44 N81-26553	[NASA-CASE-GSC-12046-1]	c52 N79-14750
System for moving a probe to follow movements of tissue		NORTH AMERICAN AVIATION, INC., CANOGA PARK, CALIF.	
[NASA-CASE-NPO-15197-1]	c52 N81-26697	Method of joining aluminum to stainless steel	
CCD correlated quadruple sampling processor		Patent	
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[NASA-CASE-NPO-15345-1]	c33 N81-27403	Patent	
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[NASA-CASE-NPO-14521-1]	c37 N81-27519	Safety-type locking pin	
A stable density-stratification solar pond		[NASA-CASE-MPS-18495]	c15 N72-11385
[NASA-CASE-NPO-15419-1]	c44 N81-27599	Hydrogen fire detection system with logic circuit to analyze the spectrum of temporal variations of the optical spectrum	
Medical diagnosis system and method with multispectral imaging		[NASA-CASE-MPS-13130]	c10 N72-17173
[NASA-CASE-NPO-14402-1]	c52 N81-27783	NORTH AMERICAN AVIATION, INC., DOWNNEY, CALIF.	
High-speed multiplexing of keyboard data inputs		Heat shield oven	
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[NASA-CASE-NPO-15431-1]	c25 N81-25178	[NASA-CASE-MSC-11010]	c15 N71-19485
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[NASA-CASE-NPO-15401-1]	c33 N81-29344	[NASA-CASE-XNP-03853]	c23 N71-21882
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[NASA-CASE-NPO-15213-1]	c51 N81-29728	[NASA-CASE-XFB-07172]	c05 N71-27234
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[NASA-CASE-NPO-14448-1]	c74 N81-29963	Aerodynamic spike nozzle Patent	
Coal desulfurization		[NASA-CASE-XGS-01143]	c31 N71-15647
[NASA-CASE-NPO-14272-1]	c25 N81-33246	Expanding center probe and drogue Patent	
Pressure letdown method and device for coal conversion systems		[NASA-CASE-XMS-03613]	c31 N71-16346
[NASA-CASE-NPO-15100-1]	c28 N81-33306	Radio frequency shielded enclosure Patent	
Method and apparatus for producing concentric hollow spheres		[NASA-CASE-XMF-09422]	c07 N71-19436
[NASA-CASE-NPO-14596-1]	c31 N81-33319	High impedance measuring apparatus Patent	
Push-pull converter with energy saving circuit for protecting switching transistors from peak power stress		[NASA-CASE-XMS-08589-1]	c09 N71-20569
[NASA-CASE-NPO-14316-1]	c33 N81-33404	Latching mechanism Patent	
		[NASA-CASE-XMS-03745]	c15 N71-21076
		Tube dimpling tool Patent	
		[NASA-CASE-XMS-06876]	c15 N71-21536
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Method and construction for protecting heat sensitive bodies from thermal radiation and convective heat Patent
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Method and device for cooling Patent
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NORTH AMERICAN AVIATION, INC., LOS ANGELES, CALIF.
Method and system for respiration analysis Patent
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NORTH AMERICAN AVIATION, INC., TORRANCE, CALIF.
Method and apparatus for detection and location of microleaks Patent
[NASA-CASE-XMP-02307] c14 N71-10779

NORTH AMERICAN AVIATION, INC., WOODLAND HILLS, CALIF.
Fluid pressure balanced seal
[NASA-CASE-XGS-01286-1] c37 N79-33469

NORTH AMERICAN PHILIPS CO., INC., TARRYTOWN, N.Y.
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[NASA-CASE-GSC-12582-1] c37 N81-16469

NORTH AMERICAN ROCKWELL CORP., CANOGA PARK, CALIF.
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[NASA-CASE-MPS-18100] c15 N72-11390

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[NASA-CASE-NPO-10890] c11 N73-12265

Droplet monitoring probe
[NASA-CASE-NPO-10985] c14 N73-20478

Circuit board package with wedge shaped covers
[NASA-CASE-MPS-21919-1] c10 N73-25243

Heat flow calorimeter
[NASA-CASE-GSC-11434-1] c34 N74-27859

NORTH AMERICAN ROCKWELL CORP., DOWNEY, CALIF.
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[NASA-CASE-MSC-13047-1] c31 N71-25434

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[NASA-CASE-MSC-15474-1] c15 N71-26162

Dye penetrant for surfaces subsequently contacted by liquid oxygen Patent
[NASA-CASE-XMP-02221] c18 N71-27170

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[NASA-CASE-MSC-11849-1] c15 N72-22488

Impact monitoring apparatus
[NASA-CASE-MSC-15626-1] c14 N72-25411

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Self-cycling fluid heater
[NASA-CASE-MSC-15567-1] c33 N73-16918

Phase protection system for ac power lines
[NASA-CASE-MSC-17832-1] c33 N74-14956

Apparatus for remote handling of materials
[NASA-CASE-LAR-10634-1] c37 N74-18123

Grain refinement control in TIG arc welding
[NASA-CASE-MSC-19095-1] c37 N75-19683

NORTH AMERICAN ROCKWELL CORP., EL SEGUNDO, CALIF.
Apparatus for testing wiring harness by vibration generating means
[NASA-CASE-MSC-15158-1] c14 N72-17325

NORTH AMERICAN ROCKWELL CORP., LOS ANGELES, CALIF.
Tactile sensing means for prosthetic limbs
[NASA-CASE-MPS-16570-1] c05 N73-32013

NORTH CAROLINA STATE UNIV., RALEIGH.
Thermal shock resistant hafnia ceramic material
[NASA-CASE-LAR-10894-1] c18 N73-14584

Thermal shock and erosion resistant tantalum carbide ceramic material
[NASA-CASE-LAR-11902-1] c27 N78-17206

NORTHEASTERN UNIV., BOSTON, MASS.
Pulse-width modulation multiplier Patent
[NASA-CASE-XEB-09213] c07 N71-12390

NORTHEOP CORP., HAWTHORNE, CALIF.
Shock tube bypass piston tunnel
[NASA-CASE-NPO-12109] c11 N72-22245

Folding structure fabricated of rigid panels
[NASA-CASE-XHQ-02146] c18 N75-27040

NORTHEOP ELECTRONICS, PALOS VERDES PENINSULA, CALIF.
Method of making dry electrodes
[NASA-CASE-FRC-10029-2] c05 N72-25121

Valve seat
[NASA-CASE-NPO-10606] c15 N72-25451

NORTHEOP SPACE LABS., HAWTHORNE, CALIF.
Method of evaluating moisture barrier properties of encapsulating materials Patent
[NASA-CASE-NPO-10051] c18 N71-24934

NORTHONICS, PALOS VERDES PENINSULA, CALIF.
Flexible conductive disc electrode Patent
[NASA-CASE-FRC-10029] c09 N71-24618

Gas low pressure low flow rate metering system Patent
[NASA-CASE-FRC-10022] c12 N71-26546

Method of removing insulated material from insulated wires
[NASA-CASE-FRC-10038] c15 N72-20444

NOTRE DAME UNIV., IND.
Synthesis of polymeric schiff bases by schiff-base exchange reactions Patent
[NASA-CASE-XMF-08651] c06 N71-11236

Direct synthesis of polymeric schiff bases from two amines and two aldehydes Patent
[NASA-CASE-XMP-08655] c06 N71-11239

Azine polymers and process for preparing the same Patent
[NASA-CASE-XMF-08656] c06 N71-11242

Synthesis of polymeric schiff bases by reaction of acetals and amine compounds Patent
[NASA-CASE-XMF-08652] c06 N71-11243

Aromatic diamine-aromatic dialdehyde high molecular weight Schiff base polymers prepared in a monofunctional Schiff base Patent
[NASA-CASE-XMP-03074] c06 N71-24740

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OAKLAND UNIV., ROCHESTER, MICH.
Optical process for producing classification maps from multispectral data
[NASA-CASE-MSC-14472-1] c43 N77-10584

Interactive color display for multispectral imagery using correlation clustering
[NASA-CASE-MSC-16253-1] c32 N79-20297

OCCIDENTAL RESEARCH CORP., LA VERNE, CALIF.
Process for preparing higher oxides of the alkali and alkaline earth metals
[NASA-CASE-ARC-10992-1] c26 N78-32229

OHIO STATE UNIV., COLUMBUS.
Horn antenna having V-shaped corrugated slots
[NASA-CASE-LAR-11112-1] c32 N76-15330

Distributed-switch Dicke radiometers
[NASA-CASE-GSC-12219-1] c35 N80-18359

OLD DOMINION UNIV., NORFOLK, VA.
Instrumentation for measuring aircraft noise and sonic boom
[NASA-CASE-LAR-11476-1] c07 N76-27232

Differential sound level meter
[NASA-CASE-LAR-12106-1] c71 N78-14867

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[NASA-CASE-LAR-12375-1] c32 N79-24203

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[NASA-CASE-LAR-12326-1] c02 N81-14968

Leading edge vortex flaps for drag reduction
[NASA-CASE-LAR-12750-1] c02 N81-19016

OREGON UNIV., PORTLAND.
Method for separating biological cells
[NASA-CASE-MPS-23883-1] c51 N80-16715

ORGANON DIAGNOSTICS, EL MONTE, CALIF.
Water system virus detection
[NASA-CASE-MSC-16098-1] c51 N79-10693

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PACKARD-BELL ELECTRONICS CORP., NEWBURY PARK, CALIF.
Optical alignment system Patent
[NASA-CASE-XNP-02029] c14 N70-41955

PANAURA CORP., PENNSAUKEN, N. J.
Method of forming transparent films of ZnO
[NASA-CASE-FRC-10019] c15 N73-12487

PCR, INC., GAINESVILLE, FLA.
Perfluoroalkyl polytriazines containing pendent iododifluoromethyl groups
[NASA-CASE-ARC-11241-1] c25 N81-14016

PENINSULAR CHEMRESEARCH, INC., GAINESVILLE, FLA.
Hydroxy terminated perfluoro ethers Patent
[NASA-CASE-NPO-10768] c06 N71-27254

Perfluoro polyether acyl fluorides
[NASA-CASE-NPO-10765] c06 N72-20121

Polyurethane resins from hydroxy terminated perfluoro ethers
[NASA-CASE-NPO-10768-2] c06 N72-27144

Highly fluorinated polyurethanes
[NASA-CASE-NPO-10767-2] c06 N72-27151

Highly fluorinated polyurethanes
[NASA-CASE-NPO-10767-1] c06 N73-33076

PENNSYLVANIA STATE UNIV., UNIVERSITY PARK.
Process for the preparation of
polycarboranylphosphazenes
[NASA-CASE-ARC-11176-2] c27 N81-27271

PHILCO-FORD CORP., HOUSTON, TEX.
Frequency modulation demodulator threshold
extension device Patent
[NASA-CASE-MSC-12165-1] c07 N71-33696

PHILCO-FORD CORP., NEWPORT BEACH, CALIF.
Mechanically extendible telescoping boom
[NASA-CASE-NPO-11118] c03 N72-25021

PHILCO-FORD CORP., PALO ALTO, CALIF.
Composite antenna feed
[NASA-CASE-GSC-11046-1] c07 N73-26013

Amplitude steered array
[NASA-CASE-GSC-11446-1] c33 N74-20860

PHOENIX CORP., MCLEAN, VA.
External bulb variable volume maser
[NASA-CASE-GSC-12334-1] c36 N79-14362

Off-axis coherently pumped laser
[NASA-CASE-GSC-12592-1] c36 N81-12407

PITTSBURG UNIV., PA.
Method and device for the detection of phenol
and related compounds
[NASA-CASE-LEN-12513-1] c25 N79-22235

PLANNING RESEARCH CORP., MCLEAN, VA.
Telephone multiline signaling using common
signal pair
[NASA-CASE-KSC-11023-1] c32 N79-23310

PRATT AND WHITNEY AIRCRAFT, EAST HARTFORD, CONN.
Liquid-gas separation system Patent
[NASA-CASE-XMS-01624] c15 N70-40062

Vibration damping system Patent
[NASA-CASE-XMS-01620] c23 N71-15673

Vapor pressure measuring system and method Patent
[NASA-CASE-XMS-01618] c14 N71-20741

Sealing member and combination thereof and
method of producing said sealing member Patent
[NASA-CASE-XMS-01625] c15 N71-23022

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QUANTUM DYNAMICS, TARZANA, CALIF.
Respiratory analysis system and method
[NASA-CASE-MSC-13436-1] c05 N73-32015

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RADIATION, INC., MELBOURNE, FLA.
Remote platform power conserving system
[NASA-CASE-GSC-11182-1] c15 N75-13007

RADIATION INSTRUMENT DEVELOPMENT LAB., INC.,
MELROSE PARK, ILL.
High speed binary to decimal conversion system
Patent
[NASA-CASE-IGS-01230] c08 N71-19544

RADIATION SYSTEMS, INC., MCLEAN, VA.
Monopulse tracking system Patent
[NASA-CASE-IGS-01155] c10 N71-21483

RADIO CORP. OF AMERICA, LANCASTER, PA.
Bonding graphite with fused silver chloride
[NASA-CASE-IGS-00963] c15 N69-39735

RADIO CORP. OF AMERICA, NEW YORK.
Water cooled contactor for anode in carbon arc
mechanism
[NASA-CASE-XMS-03700] c15 N69-24266

Apparatus for ballasting high frequency
transistors
[NASA-CASE-IGS-05003] c09 N69-24318

Helical coaxial resonator RF filter
[NASA-CASE-XGS-02816] c07 N69-24323

Radiation resistant silicon semiconductor
devices Patent
[NASA-CASE-IGS-07801] c09 N71-12513

GaAs solar detector using manganese as a doping
agent Patent
[NASA-CASE-INP-01328] c26 N71-18064

Thermocouple assembly Patent
[NASA-CASE-INP-01659] c14 N71-23039

Method of erasing target material of a vidicon
tube or the like Patent
[NASA-CASE-INP-06028] c09 N71-23189

Transient augmentation circuit for pulse
amplifiers Patent
[NASA-CASE-INP-01068] c10 N71-28739

RADIO CORP. OF AMERICA, PRINCETON, N. J.
Connector strips-positive, negative and T tabs
[NASA-CASE-IGS-01395] c03 N69-21539

Solar cell including second surface mirrors Patent
[NASA-CASE-NPO-10109] c03 N71-11049

Collapsible reflector Patent
[NASA-CASE-XMS-03454] c09 N71-20658

Simple method of making photovoltaic junctions.
Patent
[NASA-CASE-INP-01960] c09 N71-23027

Method of electrolytically binding a layer of
semiconductors together Patent
[NASA-CASE-INP-01959] c26 N71-23043

Method and apparatus for distillation of liquids
Patent
[NASA-CASE-INP-08124] c15 N71-27184

Maximum power point tracker Patent
[NASA-CASE-GSC-10376-1] c14 N71-27407

Method of changing the conductivity of vapor
deposited gallium arsenide by the introduction
of water into the vapor deposition atmosphere
Patent
[NASA-CASE-XNE-01961] c26 N71-29156

Radial heat flux transformer
[NASA-CASE-NPO-10828] c33 N72-17948

Target acquisition antenna
[NASA-CASE-GSC-10064-1] c10 N72-22235

Method for distillation of liquids
[NASA-CASE-XNP-08124-2] c06 N73-13129

Hermetically sealed semiconductor
[NASA-CASE-GSC-10791-1] c15 N73-14469

Thermal flux transfer system
[NASA-CASE-NPO-12070-1] c28 N73-32606

Rotary solenoid shutter drive assembly and
rotary inertia damper and stop plate assembly
[NASA-CASE-GSC-11560-1] c33 N74-20861

Frequency measurement by coincidence detection
with standard frequency
[NASA-CASE-MSC-14649-1] c33 N76-16331

RAND CORP., SANTA MONICA, CALIF.
Satellite communication system Patent
[NASA-CASE-INP-02389] c07 N71-28900

RAYMOND ENGINEERING LAB., INC., MIDDLETOWN, CONN.
Synchronous servo loop control system Patent
[NASA-CASE-INP-03744] c10 N71-20448

RATHEON CO., SUDBURY, MASS.
Laser Doppler system for measuring three
dimensional vector velocity Patent
[NASA-CASE-MFS-20386] c21 N71-19212

Clear air turbulence detector
[NASA-CASE-MFS-21244-1] c36 N75-15028

RCA CORP., PRINCETON, N. J.
Means for growing ribbon crystals without
subjecting the crystals to thermal
shock-induced strains
[NASA-CASE-NFO-14298-1] c76 N80-32244

Apparatus for use in the production of
ribbon-shaped crystals from a silicon melt
[NASA-CASE-NFO-14297-1] c33 N81-19389

RCA LABS., PRINCETON, N. J.
Solar cell with improved N-region contact and
method of forming the same
[NASA-CASE-NFO-14205-1] c44 N79-31752

RCA SERVICE CO., INC., CAMDEN, N. J.
Apparatus for inspecting microfilm Patent
[NASA-CASE-MFS-20240] c14 N71-26788

RENSSELAER POLYTECHNIC INST., TROY, N. Y.
Coincidence apparatus for detecting particles
[NASA-CASE-XLA-07813] c14 N72-17328

Dual acting slit control mechanism
[NASA-CASE-LAR-11370-1] c35 N80-28686

RESEARCH TRIANGLE INST., DURHAM, N. C.
Semiconductor p-n junction stress and strain
sensor
[NASA-CASE-XLA-04980] c09 N69-27422

ROCHESTER UNIV., N. Y.
Concave grating spectrometer Patent
[NASA-CASE-IGS-01036] c14 N70-40063

ROCKETDYNE, CANOGA PARK, CALIF.
Frequency to analog converter Patent
[NASA-CASE-INP-07040] c08 N71-12500

Load cell protection device Patent
[NASA-CASE-XMS-06782] c32 N71-15974

Thermobulb mount Patent
[NASA-CASE-NFO-10158] c33 N71-16356

Laminar flow enhancement Patent
[NASA-CASE-NPO-10122] c12 N71-17631

Temperature sensitive flow regulator Patent
[NASA-CASE-MFS-14259] c15 N71-19213

Hydrogen leak detection device Patent
[NASA-CASE-MFS-11537] c14 N71-20442

Technique of elbow bending small jacketed transfer lines Patent
[NASA-CASE-XNP-10475] c15 N71-24679

Gas liquefaction and dispensing apparatus Patent
[NASA-CASE-NPO-10070] c15 N71-27372

Locking device for turbine rotor blades Patent
[NASA-CASE-XNP-00816] c28 N71-28928

Laser camera and diffusion filter therefore Patent
[NASA-CASE-NPO-10417] c16 N71-33410

Hydrazinium nitroformate propellant stabilized with nitroguanidine
[NASA-CASE-NPO-12000] c27 N72-25699

Hydrazinium nitroformate propellant with saturated polymeric hydrocarbon binder
[NASA-CASE-NPO-12015] c27 N73-16764

Novel polymers and method of preparing same
[NASA-CASE-NPO-10998-1] c06 N73-32029

Internally supported flexible duct joint
[NASA-CASE-MFS-19193-1] c37 N75-15686

Method of heat treating age-hardenable alloys
[NASA-CASE-XNP-01311] c26 N75-29236

Thrust measurement
[NASA-CASE-XMS-05731] c35 N75-29382

Device for installing rocket engines
[NASA-CASE-MFS-19220-1] c20 N76-22296

ROCKWELL INTERNATIONAL CORP., CANOGA PARK, CALIF.

Brazing alloy binder
[NASA-CASE-XNP-05868] c26 N75-27125

Brazing alloy composition
[NASA-CASE-XNP-06053] c26 N75-27126

Brazing alloy
[NASA-CASE-XNP-03878] c26 N75-27127

Method and apparatus for vibration analysis utilizing the Mossbauer effect
[NASA-CASE-XNP-05882] c35 N75-27329

Externally supported internally stabilized flexible duct joint
[NASA-CASE-MFS-19194-1] c37 N76-14460

Accumulator
[NASA-CASE-MFS-19287-1] c34 N77-30399

Laser extensometer
[NASA-CASE-MFS-19259-1] c36 N78-14380

Stable superconducting magnet
[NASA-CASE-XNP-05373-1] c33 N79-21264

ROCKWELL INTERNATIONAL CORP., DOWNEY, CALIF.

Apparatus for positioning modular components on a vertical or overhead surface
[NASA-CASE-LAR-11465-1] c37 N76-21554

Planged major modular assembly jig
[NASA-CASE-MSC-19372-1] c39 N76-31562

Aircraft-mounted crash-activated transmitter device
[NASA-CASE-MFS-16609-3] c03 N76-32140

Window defect planar mapping technique
[NASA-CASE-MSC-19442-1] c74 N77-10899

Mechanical sequencer
[NASA-CASE-MSC-19536-1] c37 N77-22482

Non-floating universal joint
[NASA-CASE-MSC-19546-1] c37 N77-25536

Load regulating latch
[NASA-CASE-MSC-19535-1] c37 N77-32499

Adjustable securing base
[NASA-CASE-MSC-19666-1] c37 N78-17383

Method of producing complex aluminum alloy parts of high temper, and products thereof
[NASA-CASE-MSC-19693-1] c26 N78-24333

Flexible pile thermal barrier insulator
[NASA-CASE-MSC-19568-1] c34 N78-25350

Variable contour securing system
[NASA-CASE-MSC-16270-1] c37 N78-27423

Multi-purpose wind tunnel reaction control model block
[NASA-CASE-MSC-19706-1] c09 N78-31129

Sequencing device utilizing planetary gear set
[NASA-CASE-MSC-19514-1] c37 N79-20377

System for automatically switching transformer coupled lines
[NASA-CASE-MSC-16697-1] c33 N79-28415

Precision heat forming of tetrafluoroethylene tubing
[NASA-CASE-MSC-18430-1] c31 N80-17292

Pressure limiting propellant actuating system
[NASA-CASE-MSC-18179-1] c20 N80-18097

High temperature penetrator assembly with bayonet plug and ramp-activated lock
[NASA-CASE-MSC-18526-1] c35 N80-19468

Floating nut retention system
[NASA-CASE-MSC-16938-1] c37 N80-23653

Heat treat fixture and method of heat treating
[NASA-CASE-LAR-11821-1] c26 N80-28492

Complementary cross-slot phased array antenna
[NASA-CASE-MSC-18532-1] c32 N80-29543

Coaxial phased array antenna
[NASA-CASE-MSC-16800-1] c32 N81-14187

Installing fiber insulation
[NASA-CASE-MSC-16973-1] c37 N81-14317

Thermal barrier pressure seal
[NASA-CASE-MSC-18134-1] c37 N81-15363

A method and technique for installing light-weight fragile, high-temperature fiber insulation
[NASA-CASE-MSC-16934-2] c37 N81-16468

Apparatus for accurately preloading auger attachment means for frangible protective material
[NASA-CASE-MSC-18791-1] c37 N81-24446

ROCKWELL INTERNATIONAL CORP., LOS ANGELES, CALIF.

Length mode piezoelectric ultrasonic transducer for inspection of solid objects
[NASA-CASE-MSC-19672-1] c38 N79-14398

ROPH CORP., CHULA VISTA, CALIF.

Method of forming shapes from planar sheets of thermosetting materials
[NASA-CASE-NPO-11036] c15 N72-24522

ROYAL AIRCRAFT ESTABLISHMENT, FARNBOROUGH (ENGLAND).

Garments for controlling the temperature of the body Patent
[NASA-CASE-XMS-10269] c05 N71-24147

RYAN AERONAUTICAL CO., SAN DIEGO, CALIF.

Wing deployment method and apparatus Patent
[NASA-CASE-XMS-00907] c02 N70-41630

Masking device Patent
[NASA-CASE-XNP-02092] c15 N70-42033

S

SAN JOSE STATE UNIV., CALIF.

Chelate-modified polymers for atmospheric gas chromatography
[NASA-CASE-ARC-11154-1] c25 N80-23383

Indomethacin-antihistamine combination for gastric ulceration control
[NASA-CASE-ARC-11118-2] c52 N81-14613

Indomethacin-antihistamine combination for gastric ulceration control
[NASA-CASE-ARC-11118-1] c52 N81-29764

SANDERS ASSOCIATES, INC., NASHUA, N. H.

Increasing efficiency of switching type regulator circuits Patent
[NASA-CASE-XMS-09352] c09 N71-23316

SANTA BARBARA RESEARCH CENTER, GOLETA, CALIF.

Camera arrangement
[NASA-CASE-GSC-12032-2] c35 N76-19408

SANTA CLARA UNIV., CALIF.

Reversed cowl flap inlet thrust augmentor
[NASA-CASE-ARC-10754-1] c07 N75-24736

Noise suppressor for turbo fan jet engines
[NASA-CASE-ARC-10812-1] c07 N76-18131

System for measuring Reynolds in a turbulently flowing fluid
[NASA-CASE-ARC-10755-2] c34 N76-27517

System for measuring three fluctuating velocity components in a turbulently flowing fluid
[NASA-CASE-ARC-10974-1] c34 N77-27345

SCHJELDahl (G. T.) CO., NORTHFIELD, MINN.

Rotating mandrel for assembly of inflatable devices Patent
[NASA-CASE-XLA-04143] c15 N71-17687

Traveling sealer for contoured table Patent
[NASA-CASE-XLA-01494] c15 N71-24164

SCIENCE APPLICATIONS, INC., LA JOLLA, CALIF.

Vitra-violet process for producing flame resistant polyamides and products produced thereby
[NASA-CASE-MSC-16074-1] c27 N80-26446

SCOTT AVIATION CORP., LANCASTER, N. Y.

Self-contained breathing apparatus
[NASA-CASE-MSC-14733-1] c54 N76-24900

SERV-AIR, INC., EDWARDS, CALIF.

Portable device for use in starting air-start-units for aircraft and having cable lead testing capability
[NASA-CASE-PBC-10113-1] c33 N80-26599

SERV-AIR, INC., HOUSTON, TEX.

Stator rotor tools

[NASA-CASE-MSC-16000-1] c37 N78-24544
SHELDON CO., NORTHFIELD, MINN.
 Method and apparatus for preparing
 multiconductor cable with flat conductors
 [NASA-CASE-MFS-10946-1] c31 N79-21226
 Edge coating of flat wires
 [NASA-CASE-MFP-05757-1] c31 N79-21227
SIKORSKY AIRCRAFT, STRATFORD, CONN.
 Locking redundant link
 [NASA-CASE-LAR-11900-1] c37 N79-14382
SINGER-GENERAL PRECISION, INC., BINGHAMTON, N. Y.
 CBT blanking and brightness control circuit
 [NASA-CASE-RSC-10647-1] c10 N72-31273
SMITH ELECTRONICS, INC., CLEVELAND, OHIO.
 Phase detector assembly Patent
 [NASA-CASE-MFP-00701] c09 N70-40272
SMITHSONIAN ASTROPHYSICAL OBSERVATORY, CAMBRIDGE, MASS.
 Atomic hydrogen maser with bulb temperature
 control to remove wall shift in maser output
 frequency
 [NASA-CASE-HQN-10654-1] c16 N73-13489
 Tunable cavity resonator with ramp shaped supports
 [NASA-CASE-HQN-10790-1] c36 N74-11313
SOLID STATE RADIATIONS, INC., LOS ANGELES, CALIF.
 Biomedical radiation detecting probe Patent
 [NASA-CASE-XMS-01177] c05 N71-15440
SOUTHERN METHODIST UNIV., DALLAS, TEX.
 Process for utilizing low-cost graphite
 substrates for polycrystalline solar cells
 [NASA-CASE-GSC-12022-2] c44 N78-24609
SOUTHERN RESEARCH INST., BIRMINGHAM, ALA.
 Infusible silazane polymer and process for
 producing same
 [NASA-CASE-MFP-02526-1] c27 N79-21190
SPACE SCIENCES, INC., WALTHAM, MASS.
 Doppler shift system
 [NASA-CASE-HQN-10740-1] c72 N74-19310
SPACE TECHNOLOGY LABS., INC., REDONDO BEACH, CALIF.
 AC logic flip-flop circuits Patent
 [NASA-CASE-XGS-00823] c10 N71-15910
 Apparatus for field strength measurement of a
 space vehicle Patent
 [NASA-CASE-XLE-00820] c14 N71-16014
 Hermetically sealed explosive release mechanism
 Patent
 [NASA-CASE-XGS-00824] c15 N71-16078
 Apparatus for measuring electric field strength
 on the surface of a model vehicle Patent
 [NASA-CASE-XLE-02038] c09 N71-16086
 Solar cell mounting Patent
 [NASA-CASE-MNP-00826] c03 N71-21895
 Prestressed refractory structure Patent
 [NASA-CASE-MNP-02888] c18 N71-21068
 Linear accelerator frequency control system Patent
 [NASA-CASE-XGS-05441] c10 N71-22962
 Fluid lubricant system Patent
 [NASA-CASE-MNP-03972] c15 N71-23048
 Compensating bandwidth switching transients in
 an amplifier circuit Patent
 [NASA-CASE-MNP-01107] c10 N71-28859
SPACE LABS, INC., VAN NUYS, CALIF.
 Peak polarity selector Patent
 [NASA-CASE-FRC-10010] c10 N71-24862
 Respiration monitor
 [NASA-CASE-FRC-10012] c14 N72-17329
SPACO, INC., HUNTSVILLE, ALA.
 Sight switch using an infrared source and sensor
 Patent
 [NASA-CASE-MFP-03934] c09 N71-22985
 Method and device for detecting voids in low
 density material Patent
 [NASA-CASE-MFS-20044] c14 N71-28993
SPECTRA-PHYSICS, INC., MOUNTAIN VIEW, CALIF.
 Optically pumped resonance magnetometer for
 determining vectoral components in a spatial
 coordinate system Patent
 [NASA-CASE-XGS-04879] c14 N71-20428
SPECTROLAB, INC., SYLMAR, CALIF.
 Ultraviolet filter
 [NASA-CASE-MNP-02340] c23 N69-24332
 Central spar and module joint Patent
 [NASA-CASE-MNP-02341] c15 N71-21531
 Apparatus for applying cover slides
 [NASA-CASE-MPO-10575] c03 N72-25019
SPERRY GYROSCOPE CO., GREAT NECK, N. Y.
 Automatic gain control system
 [NASA-CASE-XMS-05307] c09 N69-24330

SPERRY RAND CORP., BLUE BELL, PA.
 Flipflop interrogator and bi-polar current
 driver Patent
 [NASA-CASE-XGS-03058] c10 N71-19547
SPERRY RAND CORP., HUNTSVILLE, ALA.
 Optical tracking mount Patent
 [NASA-CASE-MFS-14017] c14 N71-26627
 Collapsible antenna boom and transmission line
 Patent
 [NASA-CASE-MFS-20068] c07 N71-27191
 Device for handling printed circuit cards Patent
 [NASA-CASE-MFS-20453] c15 N71-29133
 Frequency division multiplex technique
 [NASA-CASE-KSC-10521] c07 N73-20176
 Device for configuring multiple leads
 [NASA-CASE-MFS-22133-1] c33 N74-26977
 System for enhancing tool-exchange capabilities
 of a portable wrench
 [NASA-CASE-MFS-22283-1] c37 N75-33395
 Remotely operable articulated manipulator
 [NASA-CASE-MFS-22707-1] c37 N76-15457
 Photovoltaic cell array
 [NASA-CASE-MFS-22458-1] c44 N77-10635
 Notch filter
 [NASA-CASE-MFS-23303-1] c32 N77-18307
 FM/CW radar system
 [NASA-CASE-MFS-22234-1] c32 N79-10264
 Anastigmatic three-mirror telescope
 [NASA-CASE-MFS-23675-1] c89 N79-10969
SPERRY RAND CORP., PHOENIX, ARIZ.
 Isolation coupling arrangement for a torque
 measuring system
 [NASA-CASE-XLA-04897] c15 N72-22482
STANFORD RESEARCH INST., MENLO PARK, CALIF.
 Automatic fault correction system for parallel
 signal channels Patent
 [NASA-CASE-MNP-03263] c09 N71-18843
 Mercury capillary interrupter Patent
 [NASA-CASE-MNP-02251] c12 N71-20896
 Magnetic power switch Patent
 [NASA-CASE-MPO-10242] c09 N71-24803
 Procedure and apparatus for determination of
 water in nitrogen tetroxide
 [NASA-CASE-MPO-10234] c06 N72-17094
STANFORD UNIV., CALIF.
 Active RC networks
 [NASA-CASE-ARC-10042-2] c10 N72-11256
 Multiloop RC active filter apparatus having low
 parameter sensitivity with low amplifier gain
 [NASA-CASE-ARC-10192] c09 N72-21245
 Spacecraft attitude control method and apparatus
 [NASA-CASE-HQN-10439] c21 N72-21624
 Laser system with an antiresonant optical ring
 [NASA-CASE-HQN-10844-1] c36 N75-19653
 Traveling wave solid state amplifier utilizing a
 semiconductor with negative differential
 mobility
 [NASA-CASE-HQN-10069] c33 N75-27251
 Reaction cured glass and glass coatings
 [NASA-CASE-ARC-11051-1] c27 N78-32260
 Fibrous refractory composite insulation
 [NASA-CASE-ARC-11169-1] c24 N79-24062
 Controller arm for a remotely related slave arm
 [NASA-CASE-ARC-11052-1] c37 N79-28551
STANFORD UNIV., PALO ALTO, CALIF.
 RC networks and amplifiers employing the same
 [NASA-CASE-XAC-05462-2] c10 N72-17171
STATE UNIV. OF IOWA, IOWA CITY.
 Mixture separation cell Patent
 [NASA-CASE-XMS-02952] c18 N71-20742
SYLVANIA ELECTRONIC SYSTEMS-CENTRAL, WILLIAMSVILLE, N. Y.
 Acquisition and tracking system for optical radar
 [NASA-CASE-MFS-20125] c16 N72-13437
 Altitude sensing device
 [NASA-CASE-XMS-01994-1] c14 N72-17326

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TAAG DESIGNS, INC., COLLEGE PARK, MD.
 Recovery of radiation damaged solar cells
 through thermal annealing
 [NASA-CASE-XGS-04047-2] c03 N72-11062
 Phototropic composition of matter
 [NASA-CASE-XGS-03736] c14 N72-22443
TAFT BROADCASTING CORP., HOUSTON, TEX.
 Television noise reduction device
 [NASA-CASE-MSC-12607-1] c32 N75-21485

TALLADEGA COLL., ALA.

Synthesis of multifunction triaryltrifluoroethanes
[NASA-CASE-ARC-11097-1] c23 N78-22154

Synthesis of multifunction triaryltrifluoroethanes
[NASA-CASE-ARC-11097-2] c23 N78-22155

TAMARACK SCIENTIFIC CO., INC., ORANGE, CALIF.

Detector absorptivity measuring method and
apparatus
[NASA-CASE-LAR-10907-1] c35 N76-29551

TECHNICOLOR, INC., PARAMUS, N.J.

Automatic lightning detection and photographic
system
[NASA-CASE-KSC-10728-1] c14 N73-32319

TECHNIDYNE, INC., WEST CHESTER, PA.

Methods and apparatus employing vibratory energy
for wrenching Patent
[NASA-CASE-MFS-20586] c15 N71-17686

TECHNION - ISRAEL INST. OF TECH., HAIFA.

Modified face seal for positive film stiffness
[NASA-CASE-LBN-12989-1] c37 N80-12414

TECHNION RESEARCH AND DEVELOPMENT FOUNDATION LTD., HAIFA (ISRAEL).

Self-stabilizing radial face seal
[NASA-CASE-LBN-12991-1] c37 N81-24442

TECHNOLOGY, INC., HOUSTON, TEX.

Apparatus and method for processing Korotkov
sounds
[NASA-CASE-MSC-13999-1] c52 N74-26626

TECHNOLOGY, INC., SAN ANTONIO, TEX.

Contourgraph system for monitoring
electrocardiograms
[NASA-CASE-MSC-13407-1] c10 N72-20225

Modification of the physical properties of
freeze-dried rice
[NASA-CASE-MSC-13540-1] c05 N72-33096

TELEDYNE BROWN ENGINEERING, HUNTSVILLE, ALA.

Self-recording portable soil penetrometer
[NASA-CASE-MFS-20774] c14 N73-15420

TEMPLE UNIV. RESEARCH INST., PHILADELPHIA, PA.

Barium release system
[NASA-CASE-LAR-10670-1] c06 N73-30097

Rocket having barium release system to create
ion clouds in the upper atmosphere
[NASA-CASE-LAR-10670-2] c15 N74-27360

TEXAS A&M UNIV., COLLEGE STATION.

Apparatus for use in examining the lattice of a
semiconductor wafer by X-ray diffraction
[NASA-CASE-MFS-23315-1] c76 N78-24950

TEXAS INSTRUMENTS, INC., DALLAS.

Integrated circuit including field effect
transistor and cermet resistor
[NASA-CASE-GSC-10835-1] c09 N72-33205

Apparatus for measuring semiconductor device
resistance
[NASA-CASE-NPO-14424-1] c33 N80-32650

TEXAS TECHNOLOGICAL UNIV., LUBBOCK.

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WESTINGHOUSE ELECTRIC CORP., LIMA, OHIO.
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WESTINGHOUSE ELECTRIC CORP., PITTSBURGH, PA.
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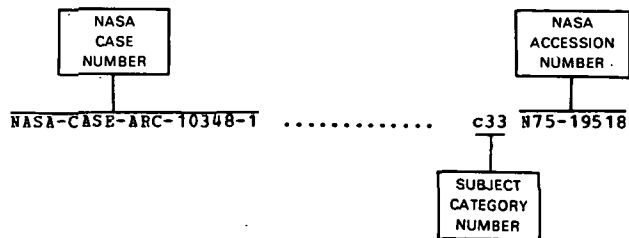
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NASA-CASE-NPO-10051	c18	N71-24534	NASA-CASE-NPO-10633	c03	N72-28025
NASA-CASE-NPO-10064	c15	N71-17693	NASA-CASE-NPO-10634	c23	N72-25619
NASA-CASE-NPO-10066	c09	N71-18598	NASA-CASE-NPO-10636	c08	N72-25210
NASA-CASE-NPO-10068	c08	N71-19288	NASA-CASE-NPO-10637	c15	N72-12409
NASA-CASE-NPO-10070	c15	N71-27372	NASA-CASE-NPO-10646	c15	N71-28467
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NASA-CASE-NPO-10112	c08	N71-12502	NASA-CASE-NPO-10677	c05	N72-11084
NASA-CASE-NPO-10117	c15	N71-15608	NASA-CASE-NPO-10679	c15	N72-21462
NASA-CASE-NPO-10118	c07	N71-24741	NASA-CASE-NPO-10680	c31	N73-14855
NASA-CASE-NPO-10122	c12	N71-17631	NASA-CASE-NPO-10682	c15	N70-34699
NASA-CASE-NPO-10123	c15	N71-24835	NASA-CASE-NPO-10691	c14	N71-26199
NASA-CASE-NPO-10138	c33	N71-16357	NASA-CASE-NPO-10694	c09	N72-20200
NASA-CASE-NPO-10140	c07	N71-24742	NASA-CASE-NPO-10700	c07	N71-33613
NASA-CASE-NPO-10141	c11	N71-24964	NASA-CASE-NPO-10701	c06	N71-28620
NASA-CASE-NPO-10143	c10	N71-26326	NASA-CASE-NPO-10704	c15	N72-20445
NASA-CASE-NPO-10144	c14	N71-17701	NASA-CASE-NPO-10711-1	c35	N77-21392
NASA-CASE-NPO-10150	c08	N71-24650	NASA-CASE-NPO-10714	c06	N69-31244
NASA-CASE-NPO-10151	c37	N78-17386	NASA-CASE-NPO-10716	c09	N71-24892
NASA-CASE-NPO-10158	c33	N71-16356	NASA-CASE-NPO-10721	c15	N72-27484
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NASA-CASE-NPO-10166-2	c35	N76-16391	NASA-CASE-NPO-10737	c28	N72-11709
NASA-CASE-NPO-10169	c10	N71-24844	NASA-CASE-NPO-10743	c08	N72-21199
NASA-CASE-NPO-10173	c15	N71-24696	NASA-CASE-NPO-10745	c08	N72-22164
NASA-CASE-NPO-10174	c14	N71-18465	NASA-CASE-NPO-10747	c03	N72-22042
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NASA-CASE-NPO-10189-1	c33	N77-21314	NASA-CASE-NPO-10758	c14	N73-14427
NASA-CASE-NPO-10194	c03	N71-20407	NASA-CASE-NPO-10760	c09	N72-25254
NASA-CASE-NPO-10198	c09	N71-24806	NASA-CASE-NPO-10764-1	c14	N73-14428
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NASA-CASE-NPO-10231	c07	N71-26101	NASA-CASE-NPO-10768	c06	N71-27254
NASA-CASE-NPO-10233-1	c74	N78-33913	NASA-CASE-NPO-10768-2	c06	N72-27144

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NASA-CASE-NPO-10778	c14	N72-11364	NASA-CASE-NPO-11338	c08	N72-25208
NASA-CASE-NPO-10781-1	c33	N77-21314	NASA-CASE-NPO-11340	c15	N72-33477
NASA-CASE-NPO-10790-1	c33	N77-21316	NASA-CASE-NPO-11342	c09	N72-25248
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NASA-CASE-NPO-10808	c15	N71-27432	NASA-CASE-NPO-11361	c07	N72-32169
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NASA-CASE-NPO-10812	c15	N73-13464	NASA-CASE-NPO-11369	c15	N73-13467
NASA-CASE-NPO-10817-1	c08	N73-30135	NASA-CASE-NPO-11371	c08	N73-12177
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NASA-CASE-NPO-10828	c33	N72-17948	NASA-CASE-NPO-11377	c15	N73-27406
NASA-CASE-NPO-10830-1	c27	N81-15104	NASA-CASE-NPO-11387	c14	N73-14429
NASA-CASE-NPO-10831	c33	N72-20915	NASA-CASE-NPO-11388	c03	N72-23048
NASA-CASE-NPO-10832	c14	N72-21405	NASA-CASE-NPO-11403-1	c33	N77-22386
NASA-CASE-NPO-10844	c07	N72-20140	NASA-CASE-NPO-11406	c08	N73-12175
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NASA-CASE-NPO-10862	c06	N72-22107	NASA-CASE-NPO-11426	c07	N73-26119
NASA-CASE-NPO-10863	c06	N70-11251	NASA-CASE-NPO-11429-1	c74	N77-21941
NASA-CASE-NPO-10863-2	c06	N72-25152	NASA-CASE-NPO-11432-2	c35	N74-15090
NASA-CASE-NPO-10866-1	c28	N79-14228	NASA-CASE-NPO-11437	c16	N72-28521
NASA-CASE-NPO-10870-1	c33	N77-22386	NASA-CASE-NPO-11456	c08	N73-26176
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NASA-CASE-NPO-10883	c31	N72-22874	NASA-CASE-NPO-11458A	c20	N78-32179
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NASA-CASE-NPO-10985	c14	N73-20478	NASA-CASE-NPO-11493	c14	N73-12447
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NASA-CASE-NPO-10999-1	c06	N73-32029	NASA-CASE-NPO-11510-1	c33	N77-21315
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NASA-CASE-NPO-11016	c08	N72-31226	NASA-CASE-NPO-11569	c10	N73-26229
NASA-CASE-NPO-11018	c08	N72-21200	NASA-CASE-NPO-11572	c07	N73-16121
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NASA-CASE-NPO-13253-1	c37	N75-18573	NASA-CASE-NPO-13673-1	c71	N77-26919
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NASA-CASE-NPO-13281-1	c37	N75-13266	NASA-CASE-NPO-13683-1	c35	N77-14411
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NASA-CASE-XAC-03107	c23	N71-16098	NASA-CASE-XGS-01022	c07	N71-16088
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NASA-CASE-XAC-03740	c14	N71-26135	NASA-CASE-XGS-01036	c14	N70-40003
NASA-CASE-XAC-03777	c10	N71-15909	NASA-CASE-XGS-01052	c14	N71-15992
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NASA-CASE-XAC-05333	c11	N71-22875	NASA-CASE-XGS-01222	c10	N71-20841
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NASA-CASE-XAC-05462-2	c10	N72-17171	NASA-CASE-XGS-01230	c08	N71-19544
NASA-CASE-XAC-05506-1	c24	N71-16095	NASA-CASE-XGS-01231	c14	N70-41676
NASA-CASE-XAC-05632	c32	N71-23971	NASA-CASE-XGS-01245-1	c35	N79-33449
NASA-CASE-XAC-05695	c25	N71-16073	NASA-CASE-XGS-01286-1	c37	N79-33469
NASA-CASE-XAC-05706	c05	N71-12342	NASA-CASE-XGS-01293-1	c35	N79-33450
NASA-CASE-XAC-05902	c11	N71-18578	NASA-CASE-XGS-01331	c14	N71-22996
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NASA-CASE-XGS-01418	c09 N71-23573	NASA-CASE-XGS-05003	c09 N69-24318
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NASA-CASE-XGS-01451	c09 N71-10677	NASA-CASE-XGS-05211	c07 N69-39980
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NASA-CASE-XGS-01475	c03 N71-11658	NASA-CASE-XGS-05290	c09 N71-25999
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NASA-CASE-XGS-02441	c15 N70-41629	NASA-CASE-XGS-08729	c28 N71-14044
NASA-CASE-XGS-02554	c31 N71-21064	NASA-CASE-XGS-09186	c33 N78-17295
NASA-CASE-XGS-02607	c31 N71-23009	NASA-CASE-XGS-09190	c31 N71-16102
NASA-CASE-XGS-02608	c07 N70-41678	NASA-CASE-XGS-10010	c03 N72-15986
NASA-CASE-XGS-02610	c14 N71-23174	NASA-CASE-XGS-10518	c16 N71-28554
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NASA-CASE-XGS-02631	c03 N71-23006	NASA-CASE-XHQ-01897	c28 N70-35381
NASA-CASE-XGS-02749	c07 N69-39978	NASA-CASE-XHQ-02146	c18 N75-27040
NASA-CASE-XGS-02751	c09 N71-23015	NASA-CASE-XHQ-03673	c33 N71-29046
NASA-CASE-XGS-02812	c09 N71-19466	NASA-CASE-XHQ-03903	c15 N69-21922
NASA-CASE-XGS-02816	c07 N69-24323	NASA-CASE-XHQ-04106	c14 N70-40240
NASA-CASE-XGS-02884	c15 N71-22705			
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NASA-CASE-XGS-03058	c10 N71-19547	NASA-CASE-XKS-02342	c05 N71-11199
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NASA-CASE-XGS-03120	c15 N71-24047	NASA-CASE-XKS-03338	c15 N71-24043
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NASA-CASE-XGS-03304	c09 N71-22988	NASA-CASE-XKS-03509	c14 N71-23175
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NASA-CASE-XGS-03390	c03 N71-23187	NASA-CASE-XKS-04631	c10 N71-23663
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NASA-CASE-XGS-03502	c10 N71-20852	NASA-CASE-XKS-07953	c15 N71-26134
NASA-CASE-XGS-03505	c03 N71-10608	NASA-CASE-XKS-08012-2	c31 N71-15566
NASA-CASE-XGS-03532	c14 N71-17627	NASA-CASE-XKS-08485	c07 N71-19493
NASA-CASE-XGS-03556	c27 N70-35534	NASA-CASE-XKS-09340	c07 N71-24614
NASA-CASE-XGS-03632	c09 N71-23311	NASA-CASE-XKS-09348	c09 N71-13521
NASA-CASE-XGS-03644	c16 N71-18614	NASA-CASE-XKS-10543	c07 N71-26292
NASA-CASE-XGS-03736	c14 N72-22443	NASA-CASE-XKS-10804	c05 N71-24606
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NASA-CASE-XGS-04224	c10 N71-26418	NASA-CASE-XLA-00087	c02 N70-33332
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NASA-CASE-XGS-04766	c08 N71-18602	NASA-CASE-XLA-00120	c21 N70-33181
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NASA-CASE-XLA-00349	c33 N70-37579	NASA-CASE-XLA-02059	c33 N71-24276
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NASA-CASE-XLA-01396	c03 N71-12259	NASA-CASE-XLA-04897	c15 N72-22482
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NASA-CASE-XLA-06339	c02 N71-13422	NASA-CASE-XLE-00283	c17 N70-36616
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NASA-CASE-XLA-06713	c14 N71-28991	NASA-CASE-XLE-00303	c15 N70-36535
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NASA-CASE-XLA-07390	c15 N71-18616	NASA-CASE-XLE-00342	c28 N70-37980
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NASA-CASE-XLA-07424	c14 N71-18482	NASA-CASE-XLE-00353	c18 N70-39897
NASA-CASE-XLA-07430	c11 N72-22246	NASA-CASE-XLE-00376	c28 N70-37245
NASA-CASE-XLA-07473	c15 N71-24895	NASA-CASE-XLE-00387	c33 N70-34812
NASA-CASE-XLA-07497	c09 N71-12514	NASA-CASE-XLE-00388	c28 N70-34788
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NASA-CASE-XLA-07813	c14 N72-17328	NASA-CASE-XLE-00455	c28 N70-38197
NASA-CASE-XLA-07828	c08 N71-27057	NASA-CASE-XLE-00490	c33 N70-34545
NASA-CASE-XLA-07829	c15 N72-16329	NASA-CASE-XLE-00503	c14 N70-34818
NASA-CASE-XLA-07911	c15 N71-15571	NASA-CASE-XLE-00519	c28 N70-41576
NASA-CASE-XLA-08254	c14 N71-26161	NASA-CASE-XLE-00586	c15 N71-15968
NASA-CASE-XLA-08491	c05 N69-21380	NASA-CASE-XLE-00620	c32 N70-41579
NASA-CASE-XLA-08493	c10 N71-19421	NASA-CASE-XLE-00660	c28 N70-39925
NASA-CASE-XLA-08507	c09 N69-39984	NASA-CASE-XLE-00685	c28 N70-41992
NASA-CASE-XLA-08530	c32 N71-25360	NASA-CASE-XLE-00686	c14 N70-41330
NASA-CASE-XLA-08645	c15 N69-21465	NASA-CASE-XLE-00690	c25 N69-39884
NASA-CASE-XLA-08646	c14 N71-17586	NASA-CASE-XLE-00702	c14 N70-40203
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NASA-CASE-XLA-08802	c06 N71-11238	NASA-CASE-XLE-00720	c14 N70-40201
NASA-CASE-XLA-08911	c15 N71-27214	NASA-CASE-XLE-00726	c17 N71-15644
NASA-CASE-XLA-08913	c14 N71-28933	NASA-CASE-XLE-00785	c33 N71-16104
NASA-CASE-XLA-08916	c15 N71-29618	NASA-CASE-XLE-00787	c14 N71-21090
NASA-CASE-XLA-08916-2	c14 N73-28487	NASA-CASE-XLE-00808	c24 N71-10560
NASA-CASE-XLA-08966-1	c17 N71-25903	NASA-CASE-XLE-00810	c15 N70-34861
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NASA-CASE-XLA-09122	c15 N69-27505	NASA-CASE-XLE-00817	c28 N70-33265
NASA-CASE-XLA-09346	c15 N71-28740	NASA-CASE-XLE-00820	c14 N71-16014
NASA-CASE-XLA-09371	c10 N71-16724	NASA-CASE-XLE-00953	c15 N71-15966
NASA-CASE-XLA-09480	c11 N71-33612	NASA-CASE-XLE-01015	c03 N69-39898
NASA-CASE-XLA-09843	c15 N72-27485	NASA-CASE-XLE-01092	c15 N71-22797
NASA-CASE-XLA-09881	c31 N71-16085	NASA-CASE-XLE-01124	c28 N71-14043
NASA-CASE-XLA-10322	c15 N72-17452	NASA-CASE-XLE-01182	c27 N71-15635
NASA-CASE-XLA-10402	c14 N71-29041	NASA-CASE-XLE-01246	c14 N71-10797
NASA-CASE-XLA-10450	c28 N71-21493	NASA-CASE-XLE-01300	c15 N70-41993
NASA-CASE-XLA-10470	c15 N72-21489	NASA-CASE-XLE-01399	c33 N71-15625
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NASA-CASE-XLA-11189	c10 N72-20222	NASA-CASE-XLE-01533	c11 N71-10777
NASA-CASE-XLE-2529-2	c36 N75-27364	NASA-CASE-XLE-01604-2	c15 N71-15610
NASA-CASE-XLE-2529-3	c33 N74-20859	NASA-CASE-XLE-01609	c14 N71-10500
NASA-CASE-XLE-00005	c28 N70-39899	NASA-CASE-XLE-01640	c31 N71-15637
NASA-CASE-XLE-00010	c15 N70-33382	NASA-CASE-XLE-01645	c03 N71-20904
NASA-CASE-XLE-00011	c14 N70-41946	NASA-CASE-XLE-01716	c09 N70-40234
NASA-CASE-XLE-00020	c15 N70-33226	NASA-CASE-XLE-01765	c18 N71-10772
NASA-CASE-XLE-00023	c15 N70-33330	NASA-CASE-XLE-01783	c28 N70-34175
NASA-CASE-XLE-00027	c33 N71-29152	NASA-CASE-XLE-01902	c28 N71-10574
NASA-CASE-XLE-00035	c33 N71-29151	NASA-CASE-XLE-01903	c22 N71-23599
NASA-CASE-XLE-00037	c28 N70-33372	NASA-CASE-XLE-01988	c27 N71-15634
NASA-CASE-XLE-00046	c15 N70-33311	NASA-CASE-XLE-01997	c06 N71-23527
NASA-CASE-XLE-00057	c28 N70-38711	NASA-CASE-XLE-02008	c09 N71-21583
NASA-CASE-XLE-00078	c28 N70-33284	NASA-CASE-XLE-02024	c14 N71-22964
NASA-CASE-XLE-00085	c28 N70-39895	NASA-CASE-XLE-02038	c09 N71-16086
NASA-CASE-XLE-00092	c15 N70-33264	NASA-CASE-XLE-02062-1	c20 N80-14188
NASA-CASE-XLE-00101	c15 N70-33376	NASA-CASE-XLE-02066	c28 N71-15661
NASA-CASE-XLE-00103	c28 N70-33241	NASA-CASE-XLE-02082	c17 N71-16026
NASA-CASE-XLE-00106	c15 N71-16076	NASA-CASE-XLE-02083	c03 N69-39983
NASA-CASE-XLE-00111	c28 N70-38199	NASA-CASE-XLE-02367-1	c31 N79-21225
NASA-CASE-XLE-00143	c14 N70-36618	NASA-CASE-XLE-02428	c17 N70-33288
NASA-CASE-XLE-00144	c28 N70-34860	NASA-CASE-XLE-02531	c05 N71-23080
NASA-CASE-XLE-00145	c28 N70-36806	NASA-CASE-XLE-02545-1	c76 N79-21910
NASA-CASE-XLE-00150	c28 N70-41818	NASA-CASE-XLE-02578	c25 N71-20747
NASA-CASE-XLE-00151	c17 N70-33283	NASA-CASE-XLE-02624	c12 N69-39988
NASA-CASE-XLE-00155	c28 N71-29154	NASA-CASE-XLE-02647	c18 N71-23658
NASA-CASE-XLE-00164	c15 N70-36411	NASA-CASE-XLE-02792	c26 N71-10607
NASA-CASE-XLE-00168	c11 N70-33278	NASA-CASE-XLE-02798	c26 N71-23654
NASA-CASE-XLE-00170	c15 N70-36412	NASA-CASE-XLE-02823	c09 N71-23443
NASA-CASE-XLE-00177	c28 N70-40367	NASA-CASE-XLE-02824	c03 N69-39890
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NASA-CASE-XLE-02991	c17 N71-16025	NASA-CASE-XMF-00462	c14 N70-34298
NASA-CASE-XLE-02998	c14 N70-42074	NASA-CASE-XMF-00479	c14 N70-34794
NASA-CASE-XLE-02999	.....	c15 N71-16052	NASA-CASE-XMF-00480	.....	c14 N70-39898
NASA-CASE-XLE-03061-1	.....	c10 N71-24798	NASA-CASE-XMF-00515	.....	c15 N70-34664
NASA-CASE-XLE-03157	.....	c28 N71-24736	NASA-CASE-XMF-00517	.....	c03 N70-34157
NASA-CASE-XLE-03186-1	.....	c09 N79-21084	NASA-CASE-XMF-00580	.....	c11 N70-35383
NASA-CASE-XLE-03280	.....	c14 N71-23693	NASA-CASE-XMF-00640	.....	c15 N70-39924
NASA-CASE-XLE-03307	.....	c33 N71-14035	NASA-CASE-XMF-00641	.....	c31 N70-36410
NASA-CASE-XLE-03432	.....	c33 N71-24145	NASA-CASE-XMF-00658	.....	c12 N70-38997
NASA-CASE-XLE-03494	.....	c27 N71-21819	NASA-CASE-XMF-00663	.....	c08 N71-18752
NASA-CASE-XLE-03512	.....	c12 N69-21466	NASA-CASE-XMF-00684	.....	c21 N71-21688
NASA-CASE-XLE-03583	.....	c31 N71-17629	NASA-CASE-XMF-00701	.....	c09 N70-40272
NASA-CASE-XLE-03629	.....	c17 N71-23248	NASA-CASE-XMF-00722	.....	c15 N70-40204
NASA-CASE-XLE-03778	c09 N69-21542	NASA-CASE-XMF-00906	c09 N70-41655
NASA-CASE-XLE-03803	c15 N71-23616	NASA-CASE-XMF-00908	c14 N70-40238
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NASA-CASE-XLE-03804	c10 N71-19471	NASA-CASE-XMF-00968	c28 N71-15660
NASA-CASE-XLE-03925	c18 N71-22894	NASA-CASE-XMF-01016	c26 N71-17818
NASA-CASE-XLE-03940	.....	c18 N71-26153	NASA-CASE-XMF-01030	.....	c18 N70-41583
NASA-CASE-XLE-03940-2	.....	c17 N72-28536	NASA-CASE-XMF-01045	.....	c15 N70-40354
NASA-CASE-XLE-04026	.....	c14 N71-23267	NASA-CASE-XMF-01049	.....	c15 N71-23049
NASA-CASE-XLE-04222	c23 N71-22881	NASA-CASE-XMF-01083	c15 N71-22723
NASA-CASE-XLE-04250	c09 N71-20446	NASA-CASE-XMF-01096	c10 N71-16030
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NASA-CASE-XLE-04503	c14 N71-24864	NASA-CASE-XMF-01099	c14 N71-15969
NASA-CASE-XLE-04526	c03 N71-11052	NASA-CASE-XMF-01129	c09 N70-38712
NASA-CASE-XLE-04535	.....	c03 N71-23354	NASA-CASE-XMF-01160	.....	c07 N71-11298
NASA-CASE-XLE-04599	.....	c22 N72-20597	NASA-CASE-XMF-01174	.....	c02 N70-41589
NASA-CASE-XLE-04603	.....	c33 N71-21507	NASA-CASE-XMF-01371	.....	c15 N70-41829
NASA-CASE-XLE-04677	c15 N71-10577	NASA-CASE-XMF-01402	c18 N71-21651
NASA-CASE-XLE-04787	c03 N71-20492	NASA-CASE-XMF-01452	c15 N70-41371
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NASA-CASE-XLE-04791	c32 N74-22096	NASA-CASE-XMF-01543	c31 N71-17730
NASA-CASE-XLE-04857	c28 N71-23568	NASA-CASE-XMF-01544	c28 N70-34162
NASA-CASE-XLE-04946	c17 N71-24911	NASA-CASE-XMF-01598	c21 N71-15583
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NASA-CASE-XLE-05230	c14 N72-27410	NASA-CASE-XMF-01772	c11 N70-41677
NASA-CASE-XLE-05230-2	c14 N73-13417	NASA-CASE-XMF-01779	c12 N71-20815
NASA-CASE-XLE-05260	.....	c14 N71-20429	NASA-CASE-XMF-01813	.....	c28 N70-41582
NASA-CASE-XLE-05641-1	c15 N71-26346	NASA-CASE-XMF-01887	c15 N71-10617
NASA-CASE-XLE-05689	c28 N71-15659	NASA-CASE-XMF-01892	c10 N71-22986
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NASA-CASE-XLE-06094	c33 N78-17293	NASA-CASE-XMF-01973	c31 N70-41588
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NASA-CASE-XLE-06461-2	c17 N72-28535	NASA-CASE-XMF-02039	c15 N71-15871
NASA-CASE-XLE-06773	c15 N71-23817	NASA-CASE-XMF-02107	c15 N71-10809
NASA-CASE-XLE-06774-2	.....	c06 N72-25150	NASA-CASE-XMF-02108	.....	c31 N70-36845
NASA-CASE-XLE-06969	.....	c17 N71-24142	NASA-CASE-XMF-02221	.....	c18 N71-27170
NASA-CASE-XLE-07087	.....	c06 N69-39889	NASA-CASE-XMF-02263	.....	c05 N74-10907
NASA-CASE-XLE-08511	.....	c18 N71-23710	NASA-CASE-XMF-02303	.....	c17 N71-23828
NASA-CASE-XLE-08511-2	.....	c18 N71-16105	NASA-CASE-XMF-02307	.....	c14 N71-10779
NASA-CASE-XLE-08569	.....	c03 N71-23449	NASA-CASE-XMF-02330	.....	c15 N71-23798
NASA-CASE-XLE-08569-2	.....	c03 N71-24681	NASA-CASE-XMF-02392	.....	c32 N71-24285
NASA-CASE-XLE-08917	.....	c15 N71-15597	NASA-CASE-XMF-02433	.....	c14 N71-10616
NASA-CASE-XLE-08917-2	.....	c15 N71-24836	NASA-CASE-XMF-02526-1	.....	c27 N79-21190
NASA-CASE-XLE-09341	.....	c12 N71-28741	NASA-CASE-XMF-02527-1	.....	c27 N79-21190
NASA-CASE-XLE-09475-1	.....	c33 N71-15568	NASA-CASE-XMF-02584	.....	c06 N71-20905
NASA-CASE-XLE-09527	.....	c15 N71-17688	NASA-CASE-XMF-02783-1	.....	c27 N79-21190
NASA-CASE-XLE-09527-2	.....	c15 N71-26189	NASA-CASE-XMF-02786	.....	c17 N71-20743
NASA-CASE-XLE-10326-2	c15 N72-29488	NASA-CASE-XMF-02822	c14 N70-41994
NASA-CASE-XLE-10326-4	c37 N74-15125	NASA-CASE-XMF-02853	c31 N70-36654
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NASA-CASE-XLE-10717	c37 N75-29426	NASA-CASE-XMF-03212	c15 N71-22721
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NASA-CASE-XLE-103477-1	c28 N71-20330	NASA-CASE-XMF-03287	c15 N71-15607
NASA-CASE-XMF-00148	c28 N70-38710	NASA-CASE-XMF-03290	c15 N71-23256
NASA-CASE-XMF-00185	.....	c21 N70-34539	NASA-CASE-XMF-03498	.....	c15 N71-15986
NASA-CASE-XMF-00324	.....	c09 N70-34596	NASA-CASE-XMF-03511	.....	c15 N71-22799
NASA-CASE-XMF-00339	c15 N70-39896	NASA-CASE-XMF-03793	c15 N71-24833
NASA-CASE-XMF-00341	c15 N70-33323	NASA-CASE-XMF-03844-1	c14 N71-26474
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NASA-CASE-XMF-00389	c31 N70-34176	NASA-CASE-XMF-03934	c09 N71-22985
NASA-CASE-XMF-00392	c15 N70-34814	NASA-CASE-XMF-03968	c14 N71-27186
NASA-CASE-XMF-00411	c11 N70-36913	NASA-CASE-XMF-03988	c15 N71-21403
NASA-CASE-XMF-00421	c09 N70-34502	NASA-CASE-XMF-04042	c15 N71-23023
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NASA-CASE-XMF-00456	c14 N70-34705	NASA-CASE-XMF-04208	c33 N71-29051
			NASA-CASE-XMF-04237	c33 N71-16278

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NASA-CASE-XMP-04367	c09 N71-23545	NASA-CASE-XMS-01618	c14 N71-20741
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NASA-CASE-XMP-04494-1	c33 N79-33392	NASA-CASE-XMS-01624	c15 N70-40062
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NASA-CASE-XMP-05114-3	c15 N71-24865	NASA-CASE-XMS-02159	c10 N71-22961
NASA-CASE-XMP-05195	c10 N71-24661	NASA-CASE-XMS-02182	c10 N71-28783
NASA-CASE-XMP-05224	c14 N71-23726	NASA-CASE-XMS-02184	c15 N71-20813
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NASA-CASE-XMP-05373-1	c33 N79-21264	NASA-CASE-XMS-02532	c15 N70-41808
NASA-CASE-XMP-05757-1	c31 N79-21227	NASA-CASE-XMS-02677	c31 N70-42075
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NASA-CASE-XMP-06065	c15 N71-20395	NASA-CASE-XMS-03542	c09 N71-28926
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NASA-CASE-XMP-06515	c14 N71-23227	NASA-CASE-XMS-03722	c15 N71-21530
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NASA-CASE-XMP-06531	c14 N71-17575	NASA-CASE-XMS-03792	c14 N70-41812
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NASA-CASE-XMP-06926	c28 N71-22583	NASA-CASE-XMS-04212-1	c05 N71-12346
NASA-CASE-XMP-07069	c15 N71-23815	NASA-CASE-XMS-04213-1	c09 N71-26002
NASA-CASE-XMP-07488	c11 N71-18773	NASA-CASE-XMS-04215-1	c09 N69-39987
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NASA-CASE-XMP-07770-2	c18 N71-26772	NASA-CASE-XMS-04269	c16 N71-22895
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NASA-CASE-XMP-08217	c03 N71-23239	NASA-CASE-XMS-04300	c09 N71-19479
NASA-CASE-XMP-08522	c15 N71-19486	NASA-CASE-XMS-04312	c07 N71-22984
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NASA-CASE-XMP-08655	c06 N71-11239	NASA-CASE-XMS-04545	c15 N71-22878
NASA-CASE-XMP-08656	c06 N71-11242	NASA-CASE-XMS-04625	c05 N71-20718
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NASA-CASE-XMP-08674	c06 N71-28807	NASA-CASE-XMS-04798	c11 N71-21474
NASA-CASE-XMP-08804	c09 N71-24717	NASA-CASE-XMS-04826	c28 N71-28849
NASA-CASE-XMP-09422	c07 N71-19436	NASA-CASE-XMS-04843	c03 N69-21469
NASA-CASE-XMP-09902	c15 N72-11387	NASA-CASE-XMS-04890-1	c15 N70-22192
NASA-CASE-XMP-10040	c15 N71-22677	NASA-CASE-XMS-04917	c14 N69-24257
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NASA-CASE-XMP-10753	c06 N71-11237	NASA-CASE-XMS-04928	c54 N78-17679
NASA-CASE-XMP-10968	c14 N71-24234	NASA-CASE-XMS-04935	c05 N71-11190
NASA-CASE-XMP-14032	c20 N71-16340	NASA-CASE-XMS-05303	c07 N69-27462
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NASA-CASE-XMS-00486	c33 N70-33344	NASA-CASE-XMS-05454-1	c07 N71-12391
NASA-CASE-XMS-00583	c28 N70-38504	NASA-CASE-XMS-05516	c15 N71-17803
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NASA-CASE-XMS-00863	c05 N70-34657	NASA-CASE-XMS-05605-1	c10 N71-19468
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NASA-CASE-XMS-00893	c07 N70-40663	NASA-CASE-XMS-05890	c09 N71-23191
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NASA-CASE-XMS-01295-1	c37 N79-21345	NASA-CASE-XMS-06497	c14 N71-26244
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NASA-CASE-XMS-01546	c14 N70-40233	NASA-CASE-XMS-06876	c15 N71-21536
NASA-CASE-XMS-01554	c10 N71-10578	NASA-CASE-XMS-06949	c09 N69-21467

NASA-CASE-XMS-07168	c07 N71-11300	NASA-CASE-XNP-01306-2	c09 N71-24596
NASA-CASE-XMS-07487	c15 N71-23255	NASA-CASE-XNP-01307	c21 N70-41656
NASA-CASE-XMS-07846-1	c09 N69-21927	NASA-CASE-XNP-01310	c33 N71-28852
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NASA-CASE-XMS-09310	c15 N71-22706	NASA-CASE-XNP-01318	c10 N71-23033
NASA-CASE-XMS-09352	c09 N71-23316	NASA-CASE-XNP-01328	c26 N71-18064
NASA-CASE-XMS-09571	c05 N71-19439	NASA-CASE-XNP-01383	c09 N71-10659
NASA-CASE-XMS-09610	c07 N71-24625	NASA-CASE-XNP-01390	c28 N70-41275
NASA-CASE-XMS-09632-1	c05 N71-11203	NASA-CASE-XNP-01412	c15 N70-42034
NASA-CASE-XMS-09635	c05 N71-24623	NASA-CASE-XNP-01458	c04 N78-17031
NASA-CASE-XMS-09636	c05 N71-12344	NASA-CASE-XNP-01464	c03 N71-10728
NASA-CASE-XMS-09637-1	c05 N71-24730	NASA-CASE-XNP-01466	c10 N71-26434
NASA-CASE-XMS-09652-1	c05 N71-26333	NASA-CASE-XNP-01472	c14 N70-41607
NASA-CASE-XMS-09653	c54 N78-17680	NASA-CASE-XNP-01501	c21 N70-41930
NASA-CASE-XMS-09690	c33 N72-25913	NASA-CASE-XNP-01567	c15 N70-41310
NASA-CASE-XMS-09691-1	c18 N71-15545	NASA-CASE-XNP-01641	c15 N71-22997
NASA-CASE-XMS-10269	c05 N71-24147	NASA-CASE-XNP-01659	c14 N71-23039
NASA-CASE-XMS-10660-1	c15 N71-25575	NASA-CASE-XNP-01660	c14 N71-23036
NASA-CASE-XMS-10984-1	c10 N71-19417	NASA-CASE-XNP-01735	c07 N71-22750
NASA-CASE-XMS-10993	c15 N71-28536	NASA-CASE-XNP-01747	c15 N71-23024
NASA-CASE-XMS-12158-1	c31 N69-27499	NASA-CASE-XNP-01749	c27 N70-41897
NASA-CASE-XMS-13052	c14 N71-20427	NASA-CASE-XNP-01753	c08 N71-22897
		NASA-CASE-XNP-01848	c15 N71-28959
NASA-CASE-XNP-00214	c15 N70-36908	NASA-CASE-XNP-01855	c15 N71-28937
NASA-CASE-XNP-00217	c28 N70-38181	NASA-CASE-XNP-01951	c09 N70-41929
NASA-CASE-XNP-00234	c28 N70-38645	NASA-CASE-XNP-01954	c28 N71-28850
NASA-CASE-XNP-00249	c28 N70-38249	NASA-CASE-XNP-01959	c26 N71-23043
NASA-CASE-XNP-00250	c11 N71-28779	NASA-CASE-XNP-01960	c09 N71-23027
NASA-CASE-XNP-00294	c21 N70-36538	NASA-CASE-XNP-01961	c26 N71-29156
NASA-CASE-XNP-00384	c09 N71-13530	NASA-CASE-XNP-01962	c32 N70-41370
NASA-CASE-XNP-00416	c15 N70-36947	NASA-CASE-XNP-02029	c14 N70-41955
NASA-CASE-XNP-00425	c11 N70-38202	NASA-CASE-XNP-02092	c15 N70-42033
NASA-CASE-XNP-00431	c09 N70-38998	NASA-CASE-XNP-02139	c18 N71-24184
NASA-CASE-XNP-00432	c08 N70-35423	NASA-CASE-XNP-02140	c09 N71-23097
NASA-CASE-XNP-00438	c21 N70-35089	NASA-CASE-XNP-02251	c12 N71-20896
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NASA-CASE-XNP-00463	c33 N70-36847	NASA-CASE-XNP-02389	c07 N71-28900
NASA-CASE-XNP-00465	c21 N70-35395	NASA-CASE-XNP-02500	c18 N71-27397
NASA-CASE-XNP-00476	c15 N70-38620	NASA-CASE-XNP-02507	c31 N71-17679
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NASA-CASE-XNP-00540	c09 N70-35382	NASA-CASE-XNP-02592	c24 N71-20518
NASA-CASE-XNP-00595	c15 N70-34567	NASA-CASE-XNP-02595	c31 N71-21881
NASA-CASE-XNP-00597	c18 N71-23088	NASA-CASE-XNP-02654	c10 N70-42032
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NASA-CASE-XNP-00612	c11 N70-38182	NASA-CASE-XNP-02748	c08 N71-22749
NASA-CASE-XNP-00614	c14 N70-36907	NASA-CASE-XNP-02778	c08 N71-22710
NASA-CASE-XNP-00637	c14 N70-40273	NASA-CASE-XNP-02791	c07 N71-23026
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NASA-CASE-XNP-00646	c14 N70-35666	NASA-CASE-XNP-02839	c28 N70-41922
NASA-CASE-XNP-00650	c27 N71-28529	NASA-CASE-XNP-02862-1	c15 N71-26294
NASA-CASE-XNP-00676	c15 N70-38996	NASA-CASE-XNP-02888	c18 N71-21068
NASA-CASE-XNP-00683	c09 N70-35425	NASA-CASE-XNP-02899-1	c33 N79-21265
NASA-CASE-XNP-00708	c14 N70-35394	NASA-CASE-XNP-02923	c28 N71-23081
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NASA-CASE-XNP-00738	c09 N70-38201	NASA-CASE-XNP-03128	c10 N70-41991
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NASA-CASE-XNP-00746	c07 N71-21476	NASA-CASE-XNP-03250	c06 N71-23500
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NASA-CASE-XNP-01152	c15 N70-41811	NASA-CASE-XNP-03918	c14 N71-23087
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NASA-CASE-XNP-01193	c10 N71-16057	NASA-CASE-XNP-04111	c14 N71-15622
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NASA-CASE-XNP-01306	c07 N71-20814	NASA-CASE-XNP-04161	c14 N71-15599

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NASA-CASE-XNP-04167-3	c36 N77-19416	NASA-CASE-XNP-09572	c14 N71-15621
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NASA-CASE-XNP-04183	c09 N69-24329	NASA-CASE-XNP-09699	c06 N71-24607
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NASA-CASE-XNP-05634	c15 N71-24834	US-PATENT-APPL-SN-2792	c14 N70-33386
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NASA-CASE-XNP-06936	c15 N71-24695	US-PATENT-APPL-SN-8204	c31 N70-37981
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NASA-CASE-XNP-07478	c14 N69-21923	US-PATENT-APPL-SN-10329	c09 N72-25251
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NASA-CASE-XNP-07659	c06 N71-22975	US-PATENT-APPL-SN-10827	c14 N72-28436
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NASA-CASE-XNP-08680	c14 N71-22995	US-PATENT-APPL-SN-14488	c09 N70-38995
NASA-CASE-XNP-08832	c08 N71-12506	US-PATENT-APPL-SN-15019	c15 N72-17455
NASA-CASE-XNP-08835-1	c37 N80-14395	US-PATENT-APPL-SN-15020	c14 N70-34697
NASA-CASE-XNP-08836	c09 N71-12515	US-PATENT-APPL-SN-15022	c15 N72-21465
NASA-CASE-XNP-08837	c18 N71-16210	US-PATENT-APPL-SN-15023	c15 N70-34699
NASA-CASE-XNP-08840	c23 N71-16365	US-PATENT-APPL-SN-15024	c09 N72-12245
NASA-CASE-XNP-08875	c10 N71-23099	US-PATENT-APPL-SN-15025	c03 N72-20033
NASA-CASE-XNP-08876	c17 N73-28573	US-PATENT-APPL-SN-15222	c18 N72-25539
NASA-CASE-XNP-08877	c15 N71-23025	US-PATENT-APPL-SN-16808	c14 N72-22445
NASA-CASE-XNP-08880	c09 N71-24808	US-PATENT-APPL-SN-17101	c28 N72-18766
NASA-CASE-XNP-08881	c17 N71-28747	US-PATENT-APPL-SN-18427	c09 N72-23172
NASA-CASE-XNP-08882	c15 N69-39935	US-PATENT-APPL-SN-18776	c28 N70-33284
NASA-CASE-XNP-08883	c23 N71-16101	US-PATENT-APPL-SN-18780	c12 N70-33305
NASA-CASE-XNP-08897	c15 N71-17694	US-PATENT-APPL-SN-18982	c28 N72-11708
NASA-CASE-XNP-08907	c23 N71-29123	US-PATENT-APPL-SN-19572	c35 N77-27368
NASA-CASE-XNP-08961	c14 N71-24809	US-PATENT-APPL-SN-19585	c15 N72-25455
NASA-CASE-XNP-09205	c14 N71-17657	US-PATENT-APPL-SN-19971	c09 N70-33312
NASA-CASE-XNP-09225	c09 N69-24333	US-PATENT-APPL-SN-20370	c33 N79-33393
NASA-CASE-XNP-09227	c15 N69-24319	US-PATENT-APPL-SN-20960	c15 N72-17453
NASA-CASE-XNP-09228	c09 N69-27500	US-PATENT-APPL-SN-21263	c01 N71-12217
NASA-CASE-XNP-09450	c10 N71-18723	US-PATENT-APPL-SN-21508	c08 N72-20176
NASA-CASE-XNP-09451	c06 N71-26754	US-PATENT-APPL-SN-21644	c05 N72-22092
NASA-CASE-XNP-09452	c15 N69-27504	US-PATENT-APPL-SN-21732	c15 N70-26819
NASA-CASE-XNP-09453	c08 N71-19420	US-PATENT-APPL-SN-21906	c09 N72-17157
NASA-CASE-XNP-09461	c28 N72-23809	US-PATENT-APPL-SN-22265	c14 N72-21405

US-PATENT-APPL-SN-22320	.....	c14 N72-11365	US-PATENT-APPL-SN-55333	.....	c10 N73-16206
US-PATENT-APPL-SN-23132	.....	c08 N72-22163	US-PATENT-APPL-SN-55534	.....	c11 N72-25288
US-PATENT-APPL-SN-23532	.....	c07 N72-21117	US-PATENT-APPL-SN-55535	.....	c14 N73-20474
US-PATENT-APPL-SN-24154	.....	c15 N70-35679	US-PATENT-APPL-SN-55536	.....	c14 N72-29464
US-PATENT-APPL-SN-24154	.....	c15 N72-17450	US-PATENT-APPL-SN-55537	.....	c18 N72-25540
US-PATENT-APPL-SN-24155	.....	c14 N73-26432	US-PATENT-APPL-SN-55806	.....	c06 N72-31140
US-PATENT-APPL-SN-24224	.....	c09 N72-20200	US-PATENT-APPL-SN-56791	.....	c10 N72-16172
US-PATENT-APPL-SN-25175	.....	c28 N70-39895	US-PATENT-APPL-SN-57252	.....	c14 N72-25414
US-PATENT-APPL-SN-25487	.....	c08 N72-21197	US-PATENT-APPL-SN-57253	.....	c18 N72-25541
US-PATENT-APPL-SN-25488	.....	c08 N72-25206	US-PATENT-APPL-SN-57399	.....	c03 N72-20034
US-PATENT-APPL-SN-26375	.....	c02 N70-33286	US-PATENT-APPL-SN-58147	.....	c28 N70-33356
US-PATENT-APPL-SN-26375	.....	c02 N70-34858	US-PATENT-APPL-SN-59892	.....	c06 N73-30097
US-PATENT-APPL-SN-26573	.....	c31 N72-22674	US-PATENT-APPL-SN-59892	.....	c15 N74-27360
US-PATENT-APPL-SN-27340	.....	c15 N72-20442	US-PATENT-APPL-SN-59893	.....	c15 N72-25456
US-PATENT-APPL-SN-28175	.....	c21 N70-33279	US-PATENT-APPL-SN-59894	.....	c23 N73-13662
US-PATENT-APPL-SN-28235	.....	c10 N72-17171	US-PATENT-APPL-SN-59895	.....	c15 N72-20445
US-PATENT-APPL-SN-29917	.....	c15 N73-13465	US-PATENT-APPL-SN-59956	.....	c14 N72-27411
US-PATENT-APPL-SN-29917	.....	c26 N74-10521	US-PATENT-APPL-SN-59966	.....	c21 N72-25595
US-PATENT-APPL-SN-29917	.....	c37 N74-13179	US-PATENT-APPL-SN-59968	.....	c15 N72-27484
US-PATENT-APPL-SN-29979	.....	c09 N75-15662	US-PATENT-APPL-SN-59969	.....	c09 N72-25249
US-PATENT-APPL-SN-30498	.....	c37 N74-21663	US-PATENT-APPL-SN-60276	.....	c22 N73-32528
US-PATENT-APPL-SN-31242	.....	c28 N70-33374	US-PATENT-APPL-SN-60531	.....	c28 N70-37980
US-PATENT-APPL-SN-31702	.....	c16 N73-16536	US-PATENT-APPL-SN-60536	.....	c02 N70-38009
US-PATENT-APPL-SN-31703	.....	c09 N72-21244	US-PATENT-APPL-SN-60876	.....	c15 N72-27485
US-PATENT-APPL-SN-31885	.....	c10 N72-17172	US-PATENT-APPL-SN-60881	.....	c32 N72-25877
US-PATENT-APPL-SN-32306	.....	c33 N79-24260	US-PATENT-APPL-SN-60882	.....	c05 N73-32011
US-PATENT-APPL-SN-32496	.....	c15 N70-37925	US-PATENT-APPL-SN-60883	.....	c10 N73-13235
US-PATENT-APPL-SN-32664	.....	c11 N72-25287	US-PATENT-APPL-SN-60950	.....	c04 N73-27052
US-PATENT-APPL-SN-32665	.....	c14 N72-22444	US-PATENT-APPL-SN-61329	.....	c31 N70-37986
US-PATENT-APPL-SN-33159	.....	c10 N72-11256	US-PATENT-APPL-SN-61535	.....	c15 N72-25453
US-PATENT-APPL-SN-33398	.....	c14 N70-35587	US-PATENT-APPL-SN-61894	.....	c12 N72-21310
US-PATENT-APPL-SN-33535	.....	c06 N72-17093	US-PATENT-APPL-SN-61895	.....	c07 N72-33146
US-PATENT-APPL-SN-34989	.....	c36 N74-13205	US-PATENT-APPL-SN-63144	.....	c16 N72-28521
US-PATENT-APPL-SN-36531	.....	c07 N72-25174	US-PATENT-APPL-SN-63195	.....	c14 N72-27408
US-PATENT-APPL-SN-36534	.....	c21 N73-14692	US-PATENT-APPL-SN-63383	.....	c08 N72-20177
US-PATENT-APPL-SN-36819	.....	c23 N72-22673	US-PATENT-APPL-SN-63384	.....	c05 N72-22093
US-PATENT-APPL-SN-36926	.....	c28 N72-23810	US-PATENT-APPL-SN-63532	.....	c08 N72-25209
US-PATENT-APPL-SN-37050	.....	c33 N74-26732	US-PATENT-APPL-SN-63610	.....	c06 N72-25147
US-PATENT-APPL-SN-38262	.....	c28 N70-35422	US-PATENT-APPL-SN-64224	.....	c17 N70-38490
US-PATENT-APPL-SN-38814	.....	c15 N72-11385	US-PATENT-APPL-SN-64226	.....	c17 N70-38198
US-PATENT-APPL-SN-38816	.....	c70 N74-13436	US-PATENT-APPL-SN-64391	.....	c31 N72-25842
US-PATENT-APPL-SN-38816	.....	c74 N78-15679	US-PATENT-APPL-SN-64709	.....	c10 N72-28240
US-PATENT-APPL-SN-39185	.....	c16 N72-25485	US-PATENT-APPL-SN-64723	.....	c07 N72-25170
US-PATENT-APPL-SN-39342	.....	c09 N72-25252	US-PATENT-APPL-SN-65548	.....	c18 N70-39897
US-PATENT-APPL-SN-39343	.....	c34 N74-18552	US-PATENT-APPL-SN-65840	.....	c10 N72-20225
US-PATENT-APPL-SN-39344	.....	c14 N72-25409	US-PATENT-APPL-SN-66004	.....	c15 N72-25450
US-PATENT-APPL-SN-39755	.....	c08 N72-21198	US-PATENT-APPL-SN-66206	.....	c11 N73-13257
US-PATENT-APPL-SN-41345	.....	c09 N72-29172	US-PATENT-APPL-SN-67730	.....	c15 N73-13463
US-PATENT-APPL-SN-41346	.....	c15 N72-24522	US-PATENT-APPL-SN-67815	.....	c28 N72-22771
US-PATENT-APPL-SN-41347	.....	c09 N72-25256	US-PATENT-APPL-SN-68023	.....	c05 N72-33096
US-PATENT-APPL-SN-41348	.....	c09 N72-23173	US-PATENT-APPL-SN-68024	.....	c17 N72-22535
US-PATENT-APPL-SN-41404	.....	c03 N73-20639	US-PATENT-APPL-SN-69209	.....	c15 N72-21463
US-PATENT-APPL-SN-41430	.....	c10 N72-20221	US-PATENT-APPL-SN-69488	.....	c23 N75-14834
US-PATENT-APPL-SN-41431	.....	c37 N77-27400	US-PATENT-APPL-SN-70032	.....	c11 N73-12264
US-PATENT-APPL-SN-41455	.....	c02 N70-33255	US-PATENT-APPL-SN-70967	.....	c07 N73-13149
US-PATENT-APPL-SN-42022	.....	c15 N70-35409	US-PATENT-APPL-SN-70967	.....	c32 N74-10132
US-PATENT-APPL-SN-42088	.....	c34 N78-17336	US-PATENT-APPL-SN-71047	.....	c09 N72-21247
US-PATENT-APPL-SN-43327	.....	c15 N72-26371	US-PATENT-APPL-SN-71048	.....	c18 N73-12604
US-PATENT-APPL-SN-43883	.....	c18 N73-30532	US-PATENT-APPL-SN-72024	.....	c09 N73-12211
US-PATENT-APPL-SN-43884	.....	c15 N72-25457	US-PATENT-APPL-SN-73283	.....	c15 N72-28495
US-PATENT-APPL-SN-45053	.....	c33 N75-31330	US-PATENT-APPL-SN-73310	.....	c09 N72-25247
US-PATENT-APPL-SN-45519	.....	c14 N72-25410	US-PATENT-APPL-SN-73367	.....	c14 N71-15969
US-PATENT-APPL-SN-45549	.....	c27 N76-16228	US-PATENT-APPL-SN-73422	.....	c15 N72-25454
US-PATENT-APPL-SN-47061	.....	c26 N72-25680	US-PATENT-APPL-SN-73834	.....	c15 N72-23497
US-PATENT-APPL-SN-47062	.....	c15 N72-17451	US-PATENT-APPL-SN-73922	.....	c14 N73-25461
US-PATENT-APPL-SN-47063	.....	c33 N72-25511	US-PATENT-APPL-SN-73932	.....	c15 N72-22485
US-PATENT-APPL-SN-47063	.....	c33 N73-25952	US-PATENT-APPL-SN-74759	.....	c14 N73-20478
US-PATENT-APPL-SN-47120	.....	c31 N70-33242	US-PATENT-APPL-SN-74861	.....	c27 N72-25699
US-PATENT-APPL-SN-47121	.....	c09 N70-39915	US-PATENT-APPL-SN-74862	.....	c27 N73-16764
US-PATENT-APPL-SN-47122	c14 N70-34813	US-PATENT-APPL-SN-75431	c21 N72-31637
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US-PATENT-APPL-SN-47440	c07 N73-20174	US-PATENT-APPL-SN-77169	c14 N72-21408
US-PATENT-APPL-SN-47441	c09 N70-34559	US-PATENT-APPL-SN-77220	c14 N72-27409
US-PATENT-APPL-SN-47443	.....	c09 N72-17152	US-PATENT-APPL-SN-77221	.....	c08 N72-25210
US-PATENT-APPL-SN-48621	.....	c20 N78-32179	US-PATENT-APPL-SN-77251	.....	c25 N70-41628
US-PATENT-APPL-SN-50206	.....	c07 N72-17109	US-PATENT-APPL-SN-77252	.....	c02 N70-37939
US-PATENT-APPL-SN-50207	.....	c07 N72-20141	US-PATENT-APPL-SN-77256	.....	c15 N70-33323
US-PATENT-APPL-SN-50208	.....	c14 N73-13418	US-PATENT-APPL-SN-77786	.....	c14 N72-27412
US-PATENT-APPL-SN-50339	.....	c04 N72-33072	US-PATENT-APPL-SN-77869	.....	c37 N79-21345
US-PATENT-APPL-SN-51317	.....	c14 N73-30389	US-PATENT-APPL-SN-78065	.....	c08 N72-22162
US-PATENT-APPL-SN-51473	c02 N70-33266	US-PATENT-APPL-SN-78703	c15 N73-20514
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US-PATENT-APPL-SN-53156	c10 N71-28860	US-PATENT-APPL-SN-78717	c05 N73-13114
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US-PATENT-APPL-SN-82260	c09	N72-25262	US-PATENT-APPL-SN-025162	c35	N81-14287
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US-PATENT-APPL-SN-82648	c12	N72-25292	US-PATENT-APPL-SN-027557	c27	N81-19296
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US-PATENT-APPL-SN-83816	c44	N74-14784	US-PATENT-APPL-SN-028300	c27	N81-17259
US-PATENT-APPL-SN-84002	c08	N73-20217	US-PATENT-APPL-SN-028301	c27	N81-17262
US-PATENT-APPL-SN-84212	c27	N74-17283	US-PATENT-APPL-SN-028301	c27	N81-24256
US-PATENT-APPL-SN-84289	c15	N73-14469	US-PATENT-APPL-SN-030964	c74	N79-25876
US-PATENT-APPL-SN-84290	c05	N73-20137	US-PATENT-APPL-SN-032305	c37	N79-23432
US-PATENT-APPL-SN-84961	c02	N70-34178	US-PATENT-APPL-SN-032307	c44	N81-24519
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US-PATENT-APPL-SN-85585	c21	N70-35427	US-PATENT-APPL-SN-034529	c24	N79-23142
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US-PATENT-APPL-SN-86417	c07	N72-25171	US-PATENT-APPL-SN-037066	c25	N81-14016
US-PATENT-APPL-SN-86548	c09	N72-21243	US-PATENT-APPL-SN-037072	c31	N81-33319
US-PATENT-APPL-SN-87222	c05	N72-27103	US-PATENT-APPL-SN-037194	c37	N79-23431
US-PATENT-APPL-SN-87550	c06	N72-25146	US-PATENT-APPL-SN-037560	c74	N81-29963
US-PATENT-APPL-SN-87551	c33	N73-16918	US-PATENT-APPL-SN-038980	c07	N81-14999
US-PATENT-APPL-SN-87557	c33	N74-22864	US-PATENT-APPL-SN-039031	c32	N80-28578
US-PATENT-APPL-SN-88435	c35	N74-15C90	US-PATENT-APPL-SN-041141	c36	N79-26385
US-PATENT-APPL-SN-89209	c09	N72-25248	US-PATENT-APPL-SN-041142	c32	N81-15179
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US-PATENT-APPL-SN-89211	c14	N73-12446	US-PATENT-APPL-SN-041145	c25	N79-23167
US-PATENT-APPL-SN-89212	c08	N72-25208	US-PATENT-APPL-SN-041164	c33	N81-19392
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US-PATENT-APPL-SN-91180	c14	N70-40240	US-PATENT-APPL-SN-043912	c43	N81-17499
US-PATENT-APPL-SN-91642	c14	N72-31446	US-PATENT-APPL-SN-043913	c54	N81-27806
US-PATENT-APPL-SN-93329	c09	N73-26195	US-PATENT-APPL-SN-043941	c44	N81-19558
US-PATENT-APPL-SN-94049	c14	N73-20476	US-PATENT-APPL-SN-043942	c06	N79-24988
US-PATENT-APPL-SN-94259	c27	N70-35534	US-PATENT-APPL-SN-043943	c34	N80-18338
US-PATENT-APPL-SN-94347	c05	N72-25122	US-PATENT-APPL-SN-043944	c39	N79-25424
US-PATENT-APPL-SN-94369	c07	N71-28965	US-PATENT-APPL-SN-043945	c33	N79-25313
US-PATENT-APPL-SN-94374	c14	N72-25411	US-PATENT-APPL-SN-044429	c33	N79-25314
US-PATENT-APPL-SN-94952	c14	N70-34158	US-PATENT-APPL-SN-044431	c33	N81-27395
US-PATENT-APPL-SN-95183	c08	N73-12175	US-PATENT-APPL-SN-044432	c52	N81-20703
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US-PATENT-APPL-SN-97112	c21	N70-34539	US-PATENT-APPL-SN-051269	c33	N81-24338
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US-PATENT-APPL-SN-98517	c09	N72-25250	US-PATENT-APPL-SN-051275	c44	N79-29608
US-PATENT-APPL-SN-98640	c09	N72-25253	US-PATENT-APPL-SN-051276	c33	N81-33404
US-PATENT-APPL-SN-98772	c08	N73-12176	US-PATENT-APPL-SN-053566	c09	N79-33220
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US-PATENT-APPL-SN-98796	c09	N73-13209	US-PATENT-APPL-SN-053572	c32	N79-26253
US-PATENT-APPL-SN-99174	c14	N72-33377	US-PATENT-APPL-SN-053652	c33	N79-27395
US-PATENT-APPL-SN-99175	c09	N72-25258	US-PATENT-APPL-SN-054501	c27	N79-30376
US-PATENT-APPL-SN-99198	c31	N73-32749	US-PATENT-APPL-SN-054502	c27	N79-30375
US-PATENT-APPL-SN-99201	c15	N73-25512	US-PATENT-APPL-SN-054538	c60	N79-32852
US-PATENT-APPL-SN-99201	c37	N74-20063	US-PATENT-APPL-SN-057465	c37	N81-17433
US-PATENT-APPL-SN-99524	c06	N72-27144	US-PATENT-APPL-SN-057466	c71	N81-15767
US-PATENT-APPL-SN-99901	c37	N74-10474	US-PATENT-APPL-SN-057526	c52	N81-25662
US-PATENT-APPL-SN-99903	c11	N73-12265	US-PATENT-APPL-SN-060435	c44	N81-24520
US-PATENT-APPL-SN-003693	c52	N81-14612	US-PATENT-APPL-SN-061327	c32	N79-28383
US-PATENT-APPL-SN-006952	c27	N81-14077	US-PATENT-APPL-SN-061555	c44	N81-29524
US-PATENT-APPL-SN-007083	c26	N80-32484	US-PATENT-APPL-SN-061556	c35	N81-19427
US-PATENT-APPL-SN-008207	c32	N80-23524	US-PATENT-APPL-SN-065676	c35	N80-18364
US-PATENT-APPL-SN-008208	c37	N81-17432	US-PATENT-APPL-SN-065676	c44	N81-12542
US-PATENT-APPL-SN-008209	c32	N81-25278	US-PATENT-APPL-SN-067595	c05	N80-11065
US-PATENT-APPL-SN-008210	c05	N81-26114	US-PATENT-APPL-SN-067596	c51	N81-28698
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US-PATENT-APPL-SN-008212	c44	N80-24741	US-PATENT-APPL-SN-069485	c33	N79-31498
US-PATENT-APPL-SN-009886	c31	N80-32583	US-PATENT-APPL-SN-070771	c27	N81-17260
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US-PATENT-APPL-SN-009889	c33	N81-27396	US-PATENT-APPL-SN-073579	c33	N79-32463
US-PATENT-APPL-SN-011737	c27	N81-14078	US-PATENT-APPL-SN-076643	c32	N81-29308
US-PATENT-APPL-SN-014663	c31	N81-25259	US-PATENT-APPL-SN-078521	c32	N81-14186
US-PATENT-APPL-SN-014664	c44	N81-14389	US-PATENT-APPL-SN-078611	c04	N81-21047
US-PATENT-APPL-SN-015983	c02	N80-28300	US-PATENT-APPL-SN-078612	c74	N79-34014
US-PATENT-APPL-SN-015995	c08	N81-26152	US-PATENT-APPL-SN-079913	c05	N80-16055
US-PATENT-APPL-SN-015996	c08	N81-24106	US-PATENT-APPL-SN-079914	c44	N80-18555
US-PATENT-APPL-SN-017885	c32	N79-19195	US-PATENT-APPL-SN-088663	c33	N80-11326
US-PATENT-APPL-SN-017886	c33	N81-33405	US-PATENT-APPL-SN-089779	c26	N81-25188
US-PATENT-APPL-SN-017887	c33	N81-26358	US-PATENT-APPL-SN-090584	c74	N81-19896
US-PATENT-APPL-SN-017888	c51	N80-16715	US-PATENT-APPL-SN-092141	c27	N81-29229
US-PATENT-APPL-SN-017889	c02	N79-24958	US-PATENT-APPL-SN-092143	c32	N80-12256
US-PATENT-APPL-SN-017890	c33	N81-15192	US-PATENT-APPL-SN-092145	c37	N80-12414
US-PATENT-APPL-SN-019541	c02	N81-14568	US-PATENT-APPL-SN-093714	c44	N81-29525
US-PATENT-APPL-SN-023436	c07	N80-32392	US-PATENT-APPL-SN-095217	c74	N81-19898
US-PATENT-APPL-SN-023437	c62	N81-24779	US-PATENT-APPL-SN-096255	c37	N80-18400
US-PATENT-APPL-SN-023439	c54	N79-20746	US-PATENT-APPL-SN-096257	c37	N80-16339
US-PATENT-APPL-SN-023439	c37	N81-27519	US-PATENT-APPL-SN-098569	c35	N80-17421
US-PATENT-APPL-SN-023484	c33	N81-20352	US-PATENT-APPL-SN-098570	c44	N80-17544

US-PATENT-APPL-SN-100611	.....	c37	N80-22704	US-PATENT-APPL-SN-119336	.....	c33	N80-19424
US-PATENT-APPL-SN-100637	.....	c37	N75-18574	US-PATENT-APPL-SN-119337	.....	c24	N81-33235
US-PATENT-APPL-SN-100639	.....	c14	N72-32452	US-PATENT-APPL-SN-119339	.....	c36	N80-18381
US-PATENT-APPL-SN-100774	.....	c06	N72-25151	US-PATENT-APPL-SN-120241	.....	c15	N73-24513
US-PATENT-APPL-SN-100774	.....	c06	N73-32030	US-PATENT-APPL-SN-120795	.....	c07	N70-40202
US-PATENT-APPL-SN-100996	.....	c08	N73-13187	US-PATENT-APPL-SN-120797	.....	c14	N70-36824
US-PATENT-APPL-SN-101029	.....	c31	N70-38676	US-PATENT-APPL-SN-120803	.....	c08	N70-34743
US-PATENT-APPL-SN-101214	.....	c14	N73-26430	US-PATENT-APPL-SN-121328	.....	c23	N72-11568
US-PATENT-APPL-SN-101354	.....	c10	N73-16205	US-PATENT-APPL-SN-122965	.....	c35	N81-26431
US-PATENT-APPL-SN-102001	.....	c36	N80-18380	US-PATENT-APPL-SN-122966	.....	c33	N80-19425
US-PATENT-APPL-SN-102002	.....	c18	N81-29152	US-PATENT-APPL-SN-122967	.....	c24	N81-26179
US-PATENT-APPL-SN-102003	.....	c26	N80-14232	US-PATENT-APPL-SN-123253	.....	c10	N73-12244
US-PATENT-APPL-SN-102004	.....	c37	N81-26447	US-PATENT-APPL-SN-123597	.....	c21	N70-34297
US-PATENT-APPL-SN-102412	.....	c25	N72-33696	US-PATENT-APPL-SN-124909	.....	c14	N73-16483
US-PATENT-APPL-SN-102593	.....	c37	N80-14400	US-PATENT-APPL-SN-125234	.....	c07	N73-16121
US-PATENT-APPL-SN-103077	.....	c25	N72-32688	US-PATENT-APPL-SN-125235	.....	c51	N77-25769
US-PATENT-APPL-SN-103078	.....	c15	N73-12486	US-PATENT-APPL-SN-125236	.....	c14	N73-26431
US-PATENT-APPL-SN-103091	.....	c37	N74-23070	US-PATENT-APPL-SN-125979	.....	c09	N72-25255
US-PATENT-APPL-SN-103229	.....	c14	N72-22439	US-PATENT-APPL-SN-126063	.....	c25	N80-20338
US-PATENT-APPL-SN-103230	.....	c15	N73-14468	US-PATENT-APPL-SN-126064	.....	c33	N80-20488
US-PATENT-APPL-SN-103551	.....	c31	N73-14254	US-PATENT-APPL-SN-126136	.....	c34	N80-20528
US-PATENT-APPL-SN-103836	.....	c37	N80-18402	US-PATENT-APPL-SN-127234	.....	c08	N70-35423
US-PATENT-APPL-SN-103836	.....	c37	N81-24443	US-PATENT-APPL-SN-127480	.....	c37	N75-26371
US-PATENT-APPL-SN-104047	.....	c15	N72-31483	US-PATENT-APPL-SN-127481	.....	c24	N75-28135
US-PATENT-APPL-SN-104048	.....	c31	N73-14855	US-PATENT-APPL-SN-127618	.....	c02	N73-13008
US-PATENT-APPL-SN-104187	.....	c14	N70-36618	US-PATENT-APPL-SN-127647	.....	c15	N73-27405
US-PATENT-APPL-SN-104188	.....	c09	N70-34819	US-PATENT-APPL-SN-127915	.....	c02	N73-26004
US-PATENT-APPL-SN-104346	.....	c14	N73-28488	US-PATENT-APPL-SN-127984	.....	c33	N75-27250
US-PATENT-APPL-SN-104884	.....	c15	N72-33476	US-PATENT-APPL-SN-128229	.....	c35	N80-20565
US-PATENT-APPL-SN-104885	.....	c14	N73-24472	US-PATENT-APPL-SN-128230	.....	c60	N80-21987
US-PATENT-APPL-SN-105518	.....	c23	N71-15978	US-PATENT-APPL-SN-128419	.....	c14	N73-20477
US-PATENT-APPL-SN-106106	.....	c91	N74-13130	US-PATENT-APPL-SN-129071	.....	c09	N72-25254
US-PATENT-APPL-SN-106118	.....	c32	N80-16261	US-PATENT-APPL-SN-129072	.....	c15	N73-13467
US-PATENT-APPL-SN-106119	.....	c35	N80-16313	US-PATENT-APPL-SN-129073	.....	c15	N73-13464
US-PATENT-APPL-SN-106135	.....	c28	N70-34294	US-PATENT-APPL-SN-129379	.....	c37	N79-33468
US-PATENT-APPL-SN-106136	.....	c35	N80-18363	US-PATENT-APPL-SN-129579	.....	c28	N70-35381
US-PATENT-APPL-SN-106188	.....	c27	N80-16163	US-PATENT-APPL-SN-129778	.....	c37	N80-20589
US-PATENT-APPL-SN-106192	.....	c33	N80-21671	US-PATENT-APPL-SN-129779	.....	c32	N80-20453
US-PATENT-APPL-SN-106424	.....	c17	N73-24569	US-PATENT-APPL-SN-129780	.....	c44	N80-21831
US-PATENT-APPL-SN-106465	.....	c30	N73-12884	US-PATENT-APPL-SN-129783	.....	c04	N80-20249
US-PATENT-APPL-SN-107298	.....	c32	N73-13921	US-PATENT-APPL-SN-129793	.....	c33	N80-21670
US-PATENT-APPL-SN-107376	.....	c15	N73-25513	US-PATENT-APPL-SN-129798	.....	c27	N81-27271
US-PATENT-APPL-SN-107379	.....	c10	N72-33230	US-PATENT-APPL-SN-129799	.....	c27	N80-21533
US-PATENT-APPL-SN-107380	.....	c28	N73-13773	US-PATENT-APPL-SN-130353	.....	c31	N73-14853
US-PATENT-APPL-SN-107659	.....	c23	N73-20741	US-PATENT-APPL-SN-130496	.....	c36	N80-20574
US-PATENT-APPL-SN-107866	.....	c17	N70-36616	US-PATENT-APPL-SN-134479	.....	c14	N70-33179
US-PATENT-APPL-SN-107870	.....	c15	N70-36411	US-PATENT-APPL-SN-134481	.....	c11	N70-34815
US-PATENT-APPL-SN-108107	.....	c37	N80-18399	US-PATENT-APPL-SN-134567	.....	c14	N73-16484
US-PATENT-APPL-SN-108810	.....	c33	N77-22386	US-PATENT-APPL-SN-134568	.....	c06	N72-31141
US-PATENT-APPL-SN-108824	.....	c31	N73-13898	US-PATENT-APPL-SN-134571	.....	c21	N73-13644
US-PATENT-APPL-SN-109789	.....	c09	N70-34596	US-PATENT-APPL-SN-134573	.....	c09	N72-25257
US-PATENT-APPL-SN-110402	.....	c09	N72-27226	US-PATENT-APPL-SN-134619	.....	c35	N79-33449
US-PATENT-APPL-SN-110591	.....	c15	N70-39896	US-PATENT-APPL-SN-134658	.....	c15	N73-28515
US-PATENT-APPL-SN-111436	.....	c33	N80-17359	US-PATENT-APPL-SN-134782	.....	c09	N70-36494
US-PATENT-APPL-SN-111436	.....	c35	N81-29407	US-PATENT-APPL-SN-134855	.....	c44	N81-24521
US-PATENT-APPL-SN-111439	.....	c74	N81-24900	US-PATENT-APPL-SN-135038	.....	c35	N80-21723
US-PATENT-APPL-SN-111998	.....	c21	N73-30640	US-PATENT-APPL-SN-135039	.....	c35	N80-22661
US-PATENT-APPL-SN-112366	.....	c06	N72-10138	US-PATENT-APPL-SN-135056	.....	c37	N81-33483
US-PATENT-APPL-SN-112988	.....	c07	N72-32169	US-PATENT-APPL-SN-135057	.....	c08	N80-22359
US-PATENT-APPL-SN-112998	.....	c14	N73-12445	US-PATENT-APPL-SN-135056	.....	c33	N80-24549
US-PATENT-APPL-SN-112999	.....	c23	N72-25619	US-PATENT-APPL-SN-136006	.....	c09	N72-28225
US-PATENT-APPL-SN-112999	.....	c32	N79-19186	US-PATENT-APPL-SN-136007	.....	c09	N71-34212
US-PATENT-APPL-SN-113014	.....	c27	N81-24257	US-PATENT-APPL-SN-136008	.....	c27	N74-13270
US-PATENT-APPL-SN-113015	.....	c31	N80-17292	US-PATENT-APPL-SN-136085	.....	c17	N73-12547
US-PATENT-APPL-SN-114772	.....	c04	N76-26175	US-PATENT-APPL-SN-136086	.....	c15	N73-19457
US-PATENT-APPL-SN-114846	.....	c14	N73-12444	US-PATENT-APPL-SN-136253	.....	c28	N72-20767
US-PATENT-APPL-SN-114847	.....	c15	N72-28496	US-PATENT-APPL-SN-136253	.....	c27	N74-12814
US-PATENT-APPL-SN-114848	.....	c11	N72-23215	US-PATENT-APPL-SN-136660	.....	c24	N80-22410
US-PATENT-APPL-SN-114849	.....	c09	N72-27227	US-PATENT-APPL-SN-137391	.....	c36	N75-31426
US-PATENT-APPL-SN-114873	.....	c09	N73-28083	US-PATENT-APPL-SN-137912	.....	c06	N72-21105
US-PATENT-APPL-SN-115082	.....	c18	N73-13562	US-PATENT-APPL-SN-138227	.....	c26	N72-27784
US-PATENT-APPL-SN-115083	.....	c07	N73-25160	US-PATENT-APPL-SN-138229	.....	c15	N72-32487
US-PATENT-APPL-SN-115134	.....	c06	N73-13128	US-PATENT-APPL-SN-138230	.....	c32	N73-20740
US-PATENT-APPL-SN-115536	.....	c60	N80-17723	US-PATENT-APPL-SN-138944	.....	c37	N80-22703
US-PATENT-APPL-SN-115944	.....	c03	N71-34044	US-PATENT-APPL-SN-139006	.....	c09	N70-38604
US-PATENT-APPL-SN-116777	.....	c09	N73-19235	US-PATENT-APPL-SN-139007	.....	c28	N70-37245
US-PATENT-APPL-SN-116778	.....	c09	N72-33205	US-PATENT-APPL-SN-139012	.....	c03	N70-38713
US-PATENT-APPL-SN-116786	.....	c07	N72-25172	US-PATENT-APPL-SN-139094	.....	c05	N73-32011
US-PATENT-APPL-SN-116790	.....	c14	N73-30388	US-PATENT-APPL-SN-139250	.....	c04	N73-27052
US-PATENT-APPL-SN-117575	.....	c08	N73-12177	US-PATENT-APPL-SN-139528	.....	c03	N72-25020
US-PATENT-APPL-SN-118169	.....	c14	N70-35220	US-PATENT-APPL-SN-139596	.....	c33	N77-13315
US-PATENT-APPL-SN-118200	.....	c15	N70-34247	US-PATENT-APPL-SN-140439	.....	c33	N75-19518
US-PATENT-APPL-SN-118202	.....	c28	N70-38710	US-PATENT-APPL-SN-140443	.....	c09	N70-35219
US-PATENT-APPL-SN-118203	.....	c14	N70-38602	US-PATENT-APPL-SN-140509	.....	c09	N70-35382
US-PATENT-APPL-SN-118269	.....	c33	N73-26958	US-PATENT-APPL-SN-140946	.....	c18	N73-26572
US-PATENT-APPL-SN-118270	.....	c09	N72-25260	US-PATENT-APPL-SN-140946	.....	c27	N74-27037
US-PATENT-APPL-SN-119282	.....	c03	N72-23048	US-PATENT-APPL-SN-141220	.....	c33	N70-37979
US-PATENT-APPL-SN-119334	.....	c26	N80-19237	US-PATENT-APPL-SN-142583	.....	c37	N79-33469
US-PATENT-APPL-SN-119335	.....	c35	N80-19468	US-PATENT-APPL-SN-142662	.....	c23	N73-13661

US-PATENT-APPL-SN-142719	c14	N73-14429	US-PATENT-APPL-SN-162380	c36	N74-21091
US-PATENT-APPL-SN-143078	c08	N72-33172	US-PATENT-APPL-SN-163151	c74	N75-25706
US-PATENT-APPL-SN-143508	c33	N74-12913	US-PATENT-APPL-SN-163152	c17	N73-27446
US-PATENT-APPL-SN-144139	c11	N73-26238	US-PATENT-APPL-SN-163837	c47	N80-26992
US-PATENT-APPL-SN-144803	c11	N70-34844	US-PATENT-APPL-SN-163838	c25	N80-26407
US-PATENT-APPL-SN-144804	c14	N70-39898	US-PATENT-APPL-SN-163839	c23	N80-26386
US-PATENT-APPL-SN-144958	c09	N72-20206	US-PATENT-APPL-SN-163840	c37	N81-33482
US-PATENT-APPL-SN-145007	c18	N70-36400	US-PATENT-APPL-SN-164428	c09	N70-35440
US-PATENT-APPL-SN-145026	c06	N72-25152	US-PATENT-APPL-SN-164617	c06	N81-17057
US-PATENT-APPL-SN-145027	c06	N73-32029	US-PATENT-APPL-SN-165910	c32	N80-32607
US-PATENT-APPL-SN-145107	c27	N80-24440	US-PATENT-APPL-SN-166487	c11	N73-32152
US-PATENT-APPL-SN-145207	c25	N80-23394	US-PATENT-APPL-SN-166541	c14	N73-13415
US-PATENT-APPL-SN-145208	c39	N80-25693	US-PATENT-APPL-SN-166969	c15	N70-34249
US-PATENT-APPL-SN-145209	c37	N80-24619	US-PATENT-APPL-SN-166970	c15	N70-36409
US-PATENT-APPL-SN-145210	c09	N80-24334	US-PATENT-APPL-SN-167719	c16	N73-33397
US-PATENT-APPL-SN-145271	c23	N81-29160	US-PATENT-APPL-SN-168560	c02	N70-34856
US-PATENT-APPL-SN-145272	c74	N80-25134	US-PATENT-APPL-SN-168650	c14	N73-13416
US-PATENT-APPL-SN-145273	c51	N81-32829	US-PATENT-APPL-SN-168943	c54	N80-30043
US-PATENT-APPL-SN-145282	c74	N80-24152	US-PATENT-APPL-SN-168944	c37	N80-29704
US-PATENT-APPL-SN-145283	c27	N81-24256	US-PATENT-APPL-SN-168995	c33	N80-32651
US-PATENT-APPL-SN-146217	c14	N71-34389	US-PATENT-APPL-SN-169671	c10	N73-30205
US-PATENT-APPL-SN-146935	c14	N73-20475	US-PATENT-APPL-SN-169962	c34	N74-30608
US-PATENT-APPL-SN-146939	c73	N75-30876	US-PATENT-APPL-SN-169977	c14	N70-34794
US-PATENT-APPL-SN-146940	c05	N73-32014	US-PATENT-APPL-SN-170440	c15	N73-13462
US-PATENT-APPL-SN-147099	c14	N73-13417	US-PATENT-APPL-SN-170544	c36	N77-19416
US-PATENT-APPL-SN-147103	c10	N73-20253	US-PATENT-APPL-SN-170680	c34	N74-15652
US-PATENT-APPL-SN-147695	c32	N81-16338	US-PATENT-APPL-SN-170681	c10	N73-25240
US-PATENT-APPL-SN-147700	c27	N80-23454	US-PATENT-APPL-SN-171927	c33	N80-29584
US-PATENT-APPL-SN-147922	c28	N73-19793	US-PATENT-APPL-SN-171928	c33	N80-31731
US-PATENT-APPL-SN-147940	c14	N72-10375	US-PATENT-APPL-SN-171933	c31	N80-32585
US-PATENT-APPL-SN-147996	c28	N73-24784	US-PATENT-APPL-SN-171934	c35	N80-31774
US-PATENT-APPL-SN-147997	c15	N72-33477	US-PATENT-APPL-SN-172098	c33	N80-29583
US-PATENT-APPL-SN-148001	c14	N70-34298	US-PATENT-APPL-SN-172099	c32	N80-29543
US-PATENT-APPL-SN-148756	c15	N73-13466	US-PATENT-APPL-SN-172459	c06	N73-16106
US-PATENT-APPL-SN-149283	c35	N74-17153	US-PATENT-APPL-SN-172727	c33	N81-26360
US-PATENT-APPL-SN-149983	c31	N72-21893	US-PATENT-APPL-SN-172807	c07	N73-28012
US-PATENT-APPL-SN-150040	c36	N80-24602	US-PATENT-APPL-SN-173081	c28	N70-36806
US-PATENT-APPL-SN-150115	c44	N80-24747	US-PATENT-APPL-SN-173178	c33	N77-21315
US-PATENT-APPL-SN-150215	c33	N73-25952	US-PATENT-APPL-SN-173185	c23	N73-13660
US-PATENT-APPL-SN-150690	c35	N79-33450	US-PATENT-APPL-SN-173190	c05	N73-32015
US-PATENT-APPL-SN-151112	c15	N70-34814	US-PATENT-APPL-SN-173518	c60	N80-30050
US-PATENT-APPL-SN-151114	c31	N70-34176	US-PATENT-APPL-SN-173519	c44	N80-29843
US-PATENT-APPL-SN-151411	c07	N73-26118	US-PATENT-APPL-SN-173520	c37	N80-29705
US-PATENT-APPL-SN-151412	c09	N73-32112	US-PATENT-APPL-SN-173521	c27	N80-29496
US-PATENT-APPL-SN-151413	c14	N73-12447	US-PATENT-APPL-SN-173524	c35	N80-29635
US-PATENT-APPL-SN-151558	c03	N70-34134	US-PATENT-APPL-SN-173981	c14	N70-35666
US-PATENT-APPL-SN-152328	c02	N74-20646	US-PATENT-APPL-SN-174684	c33	N75-31331
US-PATENT-APPL-SN-152849	c15	N73-30457	US-PATENT-APPL-SN-175267	c14	N73-28486
US-PATENT-APPL-SN-153240	c33	N80-26601	US-PATENT-APPL-SN-175452	c27	N81-27272
US-PATENT-APPL-SN-153245	c74	N81-12862	US-PATENT-APPL-SN-175453	c85	N80-33312
US-PATENT-APPL-SN-153246	c52	N80-27073	US-PATENT-APPL-SN-175497	c08	N73-28045
US-PATENT-APPL-SN-153266	c02	N70-38811	US-PATENT-APPL-SN-175852	c25	N73-25760
US-PATENT-APPL-SN-153542	c28	N73-32606	US-PATENT-APPL-SN-175881	c09	N73-15235
US-PATENT-APPL-SN-153543	c08	N73-26176	US-PATENT-APPL-SN-175981	c16	N73-30476
US-PATENT-APPL-SN-153624	c37	N75-27376	US-PATENT-APPL-SN-175983	c31	N73-32750
US-PATENT-APPL-SN-154094	c33	N72-27959	US-PATENT-APPL-SN-177684	c28	N70-34860
US-PATENT-APPL-SN-154663	c02	N81-26073	US-PATENT-APPL-SN-177753	c07	N72-20154
US-PATENT-APPL-SN-154725	c37	N80-25660	US-PATENT-APPL-SN-177985	c35	N74-15831
US-PATENT-APPL-SN-154726	c25	N81-25159	US-PATENT-APPL-SN-176192	c25	N80-31490
US-PATENT-APPL-SN-154930	c44	N76-14600	US-PATENT-APPL-SN-178193	c52	N81-12724
US-PATENT-APPL-SN-154933	c14	N73-25463	US-PATENT-APPL-SN-178195	c35	N81-12390
US-PATENT-APPL-SN-154935	c11	N72-27262	US-PATENT-APPL-SN-178213	c25	N70-33267
US-PATENT-APPL-SN-155565	c08	N73-25206	US-PATENT-APPL-SN-178215	c25	N70-34661
US-PATENT-APPL-SN-155584	c09	N70-40123	US-PATENT-APPL-SN-178721	c03	N70-35408
US-PATENT-APPL-SN-155595	c26	N73-28710	US-PATENT-APPL-SN-178771	c23	N75-14834
US-PATENT-APPL-SN-155596	c15	N73-32361	US-PATENT-APPL-SN-180370	c28	N70-33375
US-PATENT-APPL-SN-155598	c15	N73-28516	US-PATENT-APPL-SN-180374	c28	N70-38181
US-PATENT-APPL-SN-156724	c21	N73-13643	US-PATENT-APPL-SN-180377	c15	N70-36908
US-PATENT-APPL-SN-156725	c14	N73-27377	US-PATENT-APPL-SN-180379	c21	N70-35395
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US-PATENT-APPL-SN-233587	c16	N72-22520	US-PATENT-APPL-SN-248469	c14	N73-32318
US-PATENT-APPL-SN-233743	c37	N74-13179	US-PATENT-APPL-SN-248471	c31	N74-27902
US-PATENT-APPL-SN-234222	c44	N81-24525	US-PATENT-APPL-SN-248744	c05	N81-24047
US-PATENT-APPL-SN-234223	c39	N81-24470	US-PATENT-APPL-SN-248745	c18	N81-24164
US-PATENT-APPL-SN-234244	c36	N81-19439	US-PATENT-APPL-SN-248746	c37	N81-24446
US-PATENT-APPL-SN-234568	c28	N70-34788	US-PATENT-APPL-SN-248761	c15	N74-27360
US-PATENT-APPL-SN-235162	c08	N71-12501	US-PATENT-APPL-SN-248985	c03	N71-29129
US-PATENT-APPL-SN-235266	c26	N73-32571	US-PATENT-APPL-SN-249304	c09	N81-27121
US-PATENT-APPL-SN-235268	c36	N74-15145	US-PATENT-APPL-SN-249537	c14	N71-10797
US-PATENT-APPL-SN-235269	c09	N73-30181	US-PATENT-APPL-SN-249539	c28	N71-15658
US-PATENT-APPL-SN-235295	c09	N73-30185	US-PATENT-APPL-SN-249540	c15	N70-34861
US-PATENT-APPL-SN-235338	c71	N74-31148	US-PATENT-APPL-SN-249542	c28	N70-41576
US-PATENT-APPL-SN-235363	c74	N81-24907	US-PATENT-APPL-SN-250451	c08	N70-34787
US-PATENT-APPL-SN-235588	c28	N71-28928	US-PATENT-APPL-SN-250567	c33	N71-24876
US-PATENT-APPL-SN-235796	c51	N81-29727	US-PATENT-APPL-SN-250766	c07	N73-30115
US-PATENT-APPL-SN-235797	c44	N81-19561	US-PATENT-APPL-SN-250974	c31	N71-15664
US-PATENT-APPL-SN-235866	c52	N81-33804	US-PATENT-APPL-SN-251009	c33	N81-24348
US-PATENT-APPL-SN-235867	c24	N81-19230	US-PATENT-APPL-SN-251449	c07	N70-40063
US-PATENT-APPL-SN-235957	c14	N73-27376	US-PATENT-APPL-SN-251451	c09	N70-35425
US-PATENT-APPL-SN-235962	c36	N74-11313	US-PATENT-APPL-SN-251605	c05	N73-30078
US-PATENT-APPL-SN-236052	c14	N72-25428	US-PATENT-APPL-SN-251621	c16	N73-32391
US-PATENT-APPL-SN-236281	c09	N73-20232	US-PATENT-APPL-SN-251752	c24	N74-30001
US-PATENT-APPL-SN-236285	c08	N73-26175	US-PATENT-APPL-SN-252259	c33	N70-34545
US-PATENT-APPL-SN-236748	c14	N70-40157	US-PATENT-APPL-SN-253249	c33	N74-11050
US-PATENT-APPL-SN-236749	c15	N70-40180	US-PATENT-APPL-SN-253405	c10	N73-26228

US-PATENT-APPL-SN-253725	.....	c35 N74-13129	US-PATENT-APPL-SN-272152	.....	c44 N81-27616
US-PATENT-APPL-SN-253774	.....	c25 N70-36546	US-PATENT-APPL-SN-272233	.....	c44 N81-27615
US-PATENT-APPL-SN-254173	.....	c35 N75-13213	US-PATENT-APPL-SN-272234	.....	c27 N81-27279
US-PATENT-APPL-SN-254177	.....	c10 N73-26230	US-PATENT-APPL-SN-272406	.....	c44 N81-27597
US-PATENT-APPL-SN-254323	.....	c35 N76-15434	US-PATENT-APPL-SN-272407	.....	c52 N81-27786
US-PATENT-APPL-SN-254575	.....	c25 N81-29179	US-PATENT-APPL-SN-272837	.....	c71 N81-27887
US-PATENT-APPL-SN-254688	.....	c52 N81-24717	US-PATENT-APPL-SN-273222	.....	c33 N74-27683
US-PATENT-APPL-SN-254847	.....	c15 N71-22674	US-PATENT-APPL-SN-273240	.....	c35 N74-16135
US-PATENT-APPL-SN-255132	.....	c14 N71-15598	US-PATENT-APPL-SN-273519	.....	c35 N75-25122
US-PATENT-APPL-SN-256317	.....	c52 N74-26626	US-PATENT-APPL-SN-273534	.....	c09 N70-38712
US-PATENT-APPL-SN-256484	.....	c06 N70-34946	US-PATENT-APPL-SN-274065	.....	c16 N71-28963
US-PATENT-APPL-SN-256493	.....	c20 N77-17143	US-PATENT-APPL-SN-274348	.....	c60 N76-18800
US-PATENT-APPL-SN-257346	.....	c15 N70-36901	US-PATENT-APPL-SN-274360	.....	c32 N74-20809
US-PATENT-APPL-SN-258152	.....	c35 N74-15090	US-PATENT-APPL-SN-274705	.....	c09 N81-31230
US-PATENT-APPL-SN-258171	.....	c34 N74-27744	US-PATENT-APPL-SN-274706	.....	c09 N81-31229
US-PATENT-APPL-SN-258331	.....	c03 N73-31588	US-PATENT-APPL-SN-274708	.....	c35 N81-27459
US-PATENT-APPL-SN-258931	.....	c14 N70-40203	US-PATENT-APPL-SN-275118	.....	c35 N74-18088
US-PATENT-APPL-SN-258932	.....	c05 N70-36493	US-PATENT-APPL-SN-276599	.....	c74 N81-19896
US-PATENT-APPL-SN-259208	.....	c44 N81-27599	US-PATENT-APPL-SN-276749	.....	c33 N81-27403
US-PATENT-APPL-SN-259209	.....	c03 N81-29107	US-PATENT-APPL-SN-276750	.....	c31 N81-27328
US-PATENT-APPL-SN-259210	.....	c33 N81-29344	US-PATENT-APPL-SN-277404	.....	c05 N70-39922
US-PATENT-APPL-SN-259211	.....	c28 N81-33306	US-PATENT-APPL-SN-277436	.....	c37 N74-25968
US-PATENT-APPL-SN-259212	.....	c35 N81-33449	US-PATENT-APPL-SN-277833	.....	c03 N70-41580
US-PATENT-APPL-SN-259213	.....	c25 N81-29178	US-PATENT-APPL-SN-277904	.....	c28 N74-27425
US-PATENT-APPL-SN-259487	.....	c33 N70-36847	US-PATENT-APPL-SN-277961	.....	c33 N70-36617
US-PATENT-APPL-SN-260087	.....	c21 N71-21688	US-PATENT-APPL-SN-278790	.....	c15 N70-34664
US-PATENT-APPL-SN-260093	.....	c25 N74-26948	US-PATENT-APPL-SN-279646	.....	c08 N71-21042
US-PATENT-APPL-SN-260241	.....	c74 N74-21304	US-PATENT-APPL-SN-280029	.....	c35 N74-15126
US-PATENT-APPL-SN-261183	.....	c09 N74-30597	US-PATENT-APPL-SN-280031	.....	c26 N73-26752
US-PATENT-APPL-SN-261912	.....	c14 N70-34818	US-PATENT-APPL-SN-280032	.....	c35 N74-15093
US-PATENT-APPL-SN-261917	.....	c09 N70-40272	US-PATENT-APPL-SN-280151	.....	c76 N81-30012
US-PATENT-APPL-SN-261918	.....	c28 N70-41447	US-PATENT-APPL-SN-280153	.....	c51 N81-29728
US-PATENT-APPL-SN-262430	.....	c35 N74-18323	US-PATENT-APPL-SN-280154	.....	c33 N81-27402
US-PATENT-APPL-SN-262596	.....	c14 N71-28558	US-PATENT-APPL-SN-280305	.....	c34 N74-23039
US-PATENT-APPL-SN-262596	.....	c62 N76-31946	US-PATENT-APPL-SN-280362	.....	c14 N71-28935
US-PATENT-APPL-SN-263230	.....	c33 N74-20660	US-PATENT-APPL-SN-280390	.....	c37 N74-15128
US-PATENT-APPL-SN-263498	.....	c34 N74-27659	US-PATENT-APPL-SN-280580	.....	c12 N71-21089
US-PATENT-APPL-SN-263815	.....	c09 N74-17955	US-PATENT-APPL-SN-280776	.....	c14 N70-40273
US-PATENT-APPL-SN-263828	.....	c89 N81-34122	US-PATENT-APPL-SN-280777	.....	c08 N70-41961
US-PATENT-APPL-SN-263829	.....	c05 N81-32138	US-PATENT-APPL-SN-281069	.....	c14 N70-35394
US-PATENT-APPL-SN-263830	.....	c44 N81-32609	US-PATENT-APPL-SN-281875	.....	c25 N74-18551
US-PATENT-APPL-SN-263957	.....	c52 N81-26697	US-PATENT-APPL-SN-281876	.....	c52 N74-20726
US-PATENT-APPL-SN-264268	.....	c31 N78-17238	US-PATENT-APPL-SN-281877	.....	c35 N74-15146
US-PATENT-APPL-SN-264378	.....	c24 N81-27198	US-PATENT-APPL-SN-281906	.....	c25 N75-12086
US-PATENT-APPL-SN-264380	.....	c44 N81-27558	US-PATENT-APPL-SN-282129	.....	c24 N81-29164
US-PATENT-APPL-SN-264381	.....	c52 N81-29768	US-PATENT-APPL-SN-282191	.....	c35 N81-31529
US-PATENT-APPL-SN-264728	.....	c30 N70-40016	US-PATENT-APPL-SN-282192	.....	c36 N81-29415
US-PATENT-APPL-SN-264729	.....	c33 N70-34540	US-PATENT-APPL-SN-282298	.....	c44 N81-29531
US-PATENT-APPL-SN-264731	.....	c09 N70-41655	US-PATENT-APPL-SN-282817	.....	c15 N70-40156
US-PATENT-APPL-SN-264735	.....	c28 N70-33265	US-PATENT-APPL-SN-282818	.....	c14 N71-14996
US-PATENT-APPL-SN-264736	.....	c28 N70-36802	US-PATENT-APPL-SN-283502	.....	c37 N74-21060
US-PATENT-APPL-SN-266107	.....	c11 N71-15925	US-PATENT-APPL-SN-284245	.....	c33 N74-17928
US-PATENT-APPL-SN-266253	.....	c04 N81-26685	US-PATENT-APPL-SN-284265	.....	c14 N70-34799
US-PATENT-APPL-SN-266254	.....	c27 N81-29231	US-PATENT-APPL-SN-284266	.....	c15 N71-16077
US-PATENT-APPL-SN-266255	.....	c25 N81-26203	US-PATENT-APPL-SN-284288	.....	c33 N81-29347
US-PATENT-APPL-SN-266256	.....	c25 N81-29180	US-PATENT-APPL-SN-284290	.....	c33 N81-32391
US-PATENT-APPL-SN-266687	.....	c32 N81-29312	US-PATENT-APPL-SN-284314	.....	c33 N81-31482
US-PATENT-APPL-SN-266688	.....	c37 N81-29442	US-PATENT-APPL-SN-285705	.....	c37 N74-21056
US-PATENT-APPL-SN-266771	.....	c37 N74-18127	US-PATENT-APPL-SN-286620	.....	c15 N71-30028
US-PATENT-APPL-SN-266820	.....	c07 N74-31270	US-PATENT-APPL-SN-286824	.....	c44 N79-19447
US-PATENT-APPL-SN-266822	c32 N74-10132	US-PATENT-APPL-SN-287149	c35 N74-32878
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US-PATENT-APPL-SN-266866	c33 N73-32618	US-PATENT-APPL-SN-288267	c27 N81-31364
US-PATENT-APPL-SN-266899	.....	c60 N74-12888	US-PATENT-APPL-SN-288279	.....	c27 N81-31363
US-PATENT-APPL-SN-266911	.....	c36 N74-20009	US-PATENT-APPL-SN-288434	.....	c33 N81-31483
US-PATENT-APPL-SN-266912	.....	c32 N74-19788	US-PATENT-APPL-SN-288847	.....	c33 N74-27862
US-PATENT-APPL-SN-266913	.....	c31 N74-23065	US-PATENT-APPL-SN-288856	.....	c33 N74-20859
US-PATENT-APPL-SN-266925	.....	c54 N74-17653	US-PATENT-APPL-SN-288857	.....	c14 N73-33361
US-PATENT-APPL-SN-266928	.....	c26 N74-10521	US-PATENT-APPL-SN-289017	.....	c37 N74-27905
US-PATENT-APPL-SN-266930	.....	c54 N74-12779	US-PATENT-APPL-SN-289018	.....	c08 N74-30421
US-PATENT-APPL-SN-266940	.....	c32 N74-32598	US-PATENT-APPL-SN-289033	.....	c15 N73-32358
US-PATENT-APPL-SN-266943	.....	c72 N74-19310	US-PATENT-APPL-SN-289033	.....	c37 N74-21055
US-PATENT-APPL-SN-267179	.....	c54 N81-31848	US-PATENT-APPL-SN-289048	.....	c37 N74-21057
US-PATENT-APPL-SN-267572	.....	c73 N74-26767	US-PATENT-APPL-SN-289049	.....	c19 N74-15089
US-PATENT-APPL-SN-267768	.....	c70 N74-21300	US-PATENT-APPL-SN-289050	.....	c20 N74-32919
US-PATENT-APPL-SN-267662	c33 N74-21651	US-PATENT-APPL-SN-290021	c37 N74-23064
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US-PATENT-APPL-SN-269222	c15 N70-38225	US-PATENT-APPL-SN-290868	c31 N70-34966
US-PATENT-APPL-SN-269450	.....	c36 N76-18427	US-PATENT-APPL-SN-290870	.....	c15 N70-38996
US-PATENT-APPL-SN-270118	.....	c33 N71-17610	US-PATENT-APPL-SN-290873	.....	c10 N71-16058
US-PATENT-APPL-SN-270762	.....	c37 N81-31551	US-PATENT-APPL-SN-290915	.....	c32 N74-11000
US-PATENT-APPL-SN-271821	.....	c15 N71-10778	US-PATENT-APPL-SN-291131	.....	c33 N81-31481
US-PATENT-APPL-SN-271822	.....	c15 N71-15967	US-PATENT-APPL-SN-291132	.....	c33 N81-31480
US-PATENT-APPL-SN-271823	.....	c27 N71-28929	US-PATENT-APPL-SN-291845	.....	c52 N74-27566
US-PATENT-APPL-SN-271824	.....	c07 N71-21476	US-PATENT-APPL-SN-292340	.....	c52 N79-21750
US-PATENT-APPL-SN-271951	.....	c35 N74-15092	US-PATENT-APPL-SN-292382	.....	c27 N74-17283

US-PATENT-APPL-SN-292477	c15	N73-12495	US-PATENT-APPL-SN-318443	c03	N70-34667
US-PATENT-APPL-SN-292596	c10	N71-29135	US-PATENT-APPL-SN-318848	c35	N77-14408
US-PATENT-APPL-SN-292681	c33	N74-10194	US-PATENT-APPL-SN-319150	c33	N75-19519
US-PATENT-APPL-SN-292682	c14	N73-32319	US-PATENT-APPL-SN-319410	c37	N74-20063
US-PATENT-APPL-SN-292685	c32	N74-20864	US-PATENT-APPL-SN-319892	c07	N71-10609
US-PATENT-APPL-SN-292686	c20	N74-31269	US-PATENT-APPL-SN-319893	c14	N70-41647
US-PATENT-APPL-SN-292698	c09	N73-32109	US-PATENT-APPL-SN-319894	c03	N71-11053
US-PATENT-APPL-SN-293725	c89	N74-30886	US-PATENT-APPL-SN-319905	c14	N71-10781
US-PATENT-APPL-SN-293726	c37	N74-21055	US-PATENT-APPL-SN-320233	c33	N71-15625
US-PATENT-APPL-SN-293727	c33	N74-14956	US-PATENT-APPL-SN-320595	c26	N70-40015
US-PATENT-APPL-SN-293739	c35	N74-28097	US-PATENT-APPL-SN-321179	c27	N74-21156
US-PATENT-APPL-SN-294727	c73	N77-18891	US-PATENT-APPL-SN-321180	c05	N76-29217
US-PATENT-APPL-SN-294738	c73	N78-28913	US-PATENT-APPL-SN-321656	c14	N70-41807
US-PATENT-APPL-SN-295855	c23	N71-17802	US-PATENT-APPL-SN-322545	c14	N71-10774
US-PATENT-APPL-SN-296622	c44	N76-31666	US-PATENT-APPL-SN-322565	c37	N75-27376
US-PATENT-APPL-SN-296879	c26	N71-18064	US-PATENT-APPL-SN-322997	c37	N75-15992
US-PATENT-APPL-SN-297127	c33	N74-27705	US-PATENT-APPL-SN-322997	c24	N79-25143
US-PATENT-APPL-SN-297128	c32	N74-26654	US-PATENT-APPL-SN-322998	c35	N74-32877
US-PATENT-APPL-SN-297436	c33	N79-11314	US-PATENT-APPL-SN-323182	c03	N70-41864
US-PATENT-APPL-SN-298156	c37	N75-13261	US-PATENT-APPL-SN-324029	c32	N74-27612
US-PATENT-APPL-SN-298156	c26	N75-19408	US-PATENT-APPL-SN-325784	c24	N76-14204
US-PATENT-APPL-SN-298157	c33	N74-21850	US-PATENT-APPL-SN-326198	c35	N75-12272
US-PATENT-APPL-SN-298799	c14	N71-15562	US-PATENT-APPL-SN-326298	c14	N71-22765
US-PATENT-APPL-SN-298800	c14	N70-34705	US-PATENT-APPL-SN-326299	c26	N71-17818
US-PATENT-APPL-SN-299042	c15	N71-15918	US-PATENT-APPL-SN-326326	c35	N74-32879
US-PATENT-APPL-SN-300113	c33	N70-33344	US-PATENT-APPL-SN-326327	c44	N74-27519
US-PATENT-APPL-SN-300712	c15	N70-35407	US-PATENT-APPL-SN-326364	c51	N75-13502
US-PATENT-APPL-SN-300957	c33	N71-29053	US-PATENT-APPL-SN-327163	c03	N71-20895
US-PATENT-APPL-SN-301039	c37	N74-27903	US-PATENT-APPL-SN-327565	c02	N70-36825
US-PATENT-APPL-SN-301417	c71	N74-21014	US-PATENT-APPL-SN-327921	c54	N75-13531
US-PATENT-APPL-SN-301418	c52	N76-29894	US-PATENT-APPL-SN-327969	c35	N75-13213
US-PATENT-APPL-SN-301419	c34	N76-17317	US-PATENT-APPL-SN-328140	c18	N71-21651
US-PATENT-APPL-SN-301683	c07	N71-15907	US-PATENT-APPL-SN-328792	c35	N75-12273
US-PATENT-APPL-SN-302681	c37	N75-12326	US-PATENT-APPL-SN-329237	c33	N74-34638
US-PATENT-APPL-SN-302749	c14	N70-40201	US-PATENT-APPL-SN-329243	c28	N74-33209
US-PATENT-APPL-SN-302913	c76	N79-16678	US-PATENT-APPL-SN-329331	c15	N71-15906
US-PATENT-APPL-SN-304430	c52	N74-27864	US-PATENT-APPL-SN-329595	c05	N70-41329
US-PATENT-APPL-SN-304698	c32	N70-41579	US-PATENT-APPL-SN-329958	c33	N74-22885
US-PATENT-APPL-SN-304705	c32	N74-20810	US-PATENT-APPL-SN-330209	c15	N70-41646
US-PATENT-APPL-SN-304749	c11	N71-16028	US-PATENT-APPL-SN-330210	c14	N71-21090
US-PATENT-APPL-SN-305012	c35	N74-15094	US-PATENT-APPL-SN-331323	c07	N71-16088
US-PATENT-APPL-SN-305013	c14	N73-13435	US-PATENT-APPL-SN-331324	c05	N70-35152
US-PATENT-APPL-SN-305020	c21	N70-34295	US-PATENT-APPL-SN-331759	c07	N76-18117
US-PATENT-APPL-SN-305638	c34	N74-23066	US-PATENT-APPL-SN-331760	c35	N74-27860
US-PATENT-APPL-SN-305639	c37	N74-27904	US-PATENT-APPL-SN-332123	c27	N80-32514
US-PATENT-APPL-SN-306652	c33	N74-32712	US-PATENT-APPL-SN-332313	c21	N71-10678
US-PATENT-APPL-SN-307269	c24	N71-10560	US-PATENT-APPL-SN-332339	c07	N71-11284
US-PATENT-APPL-SN-307270	c10	N71-16030	US-PATENT-APPL-SN-333766	c31	N71-15663
US-PATENT-APPL-SN-307271	c09	N71-22999	US-PATENT-APPL-SN-333770	c21	N71-15583
US-PATENT-APPL-SN-307714	c03	N76-32140	US-PATENT-APPL-SN-333912	c32	N74-19790
US-PATENT-APPL-SN-307727	c32	N74-20813	US-PATENT-APPL-SN-334349	c35	N75-19611
US-PATENT-APPL-SN-307728	c34	N74-27861	US-PATENT-APPL-SN-334672	c14	N70-41330
US-PATENT-APPL-SN-307729	c31	N74-27900	US-PATENT-APPL-SN-334678	c11	N71-10777
US-PATENT-APPL-SN-308918	c27	N71-15634	US-PATENT-APPL-SN-335201	c33	N74-17927
US-PATENT-APPL-SN-309354	c11	N71-15526	US-PATENT-APPL-SN-335441	c14	N71-23268
US-PATENT-APPL-SN-310034	c32	N74-30524	US-PATENT-APPL-SN-336103	c16	N71-15550
US-PATENT-APPL-SN-310193	c33	N74-27682	US-PATENT-APPL-SN-336319	c44	N74-33379
US-PATENT-APPL-SN-310506	c10	N71-16042	US-PATENT-APPL-SN-336320	c15	N71-15966
US-PATENT-APPL-SN-310507	c07	N71-11298	US-PATENT-APPL-SN-336607	c10	N71-15910
US-PATENT-APPL-SN-310615	c37	N74-27901	US-PATENT-APPL-SN-336608	c32	N71-17645
US-PATENT-APPL-SN-310616	c35	N74-21017	US-PATENT-APPL-SN-337487	c33	N74-26977
US-PATENT-APPL-SN-310624	c33	N74-17929	US-PATENT-APPL-SN-337816	c35	N75-15931
US-PATENT-APPL-SN-311175	c52	N74-22771	US-PATENT-APPL-SN-338484	c32	N74-20811
US-PATENT-APPL-SN-311234	c35	N74-23040	US-PATENT-APPL-SN-339040	c31	N70-41373
US-PATENT-APPL-SN-311387	c23	N71-30027	US-PATENT-APPL-SN-339806	c07	N74-27490
US-PATENT-APPL-SN-312269	c28	N71-14043	US-PATENT-APPL-SN-339821	c17	N70-33288
US-PATENT-APPL-SN-312443	c10	N71-21473	US-PATENT-APPL-SN-339825	c28	N71-15660
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US-PATENT-APPL-SN-662181	c34 N76-23522	US-PATENT-APPL-SN-677351	c35 N77-32455
US-PATENT-APPL-SN-662182	c37 N78-27424	US-PATENT-APPL-SN-677352	c43 N78-10529
US-PATENT-APPL-SN-662182	c35 N79-26372	US-PATENT-APPL-SN-677353	c52 N78-14773
US-PATENT-APPL-SN-662763	c15 N73-12489	US-PATENT-APPL-SN-677475	c32 N71-26681
US-PATENT-APPL-SN-662828	c11 N71-18578	US-PATENT-APPL-SN-677476	c14 N71-17586
US-PATENT-APPL-SN-662829	c15 N71-15597	US-PATENT-APPL-SN-677505	c09 N71-13521
US-PATENT-APPL-SN-663008	c37 N77-28486	US-PATENT-APPL-SN-677506	c16 N71-15567
US-PATENT-APPL-SN-663180	c10 N71-23663	US-PATENT-APPL-SN-677508	c16 N71-15551
US-PATENT-APPL-SN-664091	c43 N79-17288	US-PATENT-APPL-SN-678520	c20 N78-24275
US-PATENT-APPL-SN-665032	c74 N77-22950	US-PATENT-APPL-SN-678700	c05 N71-19439
US-PATENT-APPL-SN-665033	c20 N77-20162	US-PATENT-APPL-SN-678813	c33 N81-29342
US-PATENT-APPL-SN-665209	c14 N71-23725	US-PATENT-APPL-SN-679055	c08 N71-24633

US-PATENT-APPL-SN-679862	.....	c20	N71-16340	US-PATENT-APPL-SN-694406	.....	c35	N79-10389
US-PATENT-APPL-SN-679885	.....	c09	N71-12521	US-PATENT-APPL-SN-694407	.....	c27	N80-23452
US-PATENT-APPL-SN-680015	.....	c52	N79-14750	US-PATENT-APPL-SN-694855	.....	c33	N77-30365
US-PATENT-APPL-SN-680067	.....	c07	N77-27116	US-PATENT-APPL-SN-695513	.....	c07	N78-25089
US-PATENT-APPL-SN-680938	.....	c74	N77-26942	US-PATENT-APPL-SN-695973	.....	c05	N71-12343
US-PATENT-APPL-SN-680939	.....	c44	N78-10554	US-PATENT-APPL-SN-696374	.....	c44	N80-29835
US-PATENT-APPL-SN-680957	.....	c35	N77-27366	US-PATENT-APPL-SN-696679	.....	c38	N79-14398
US-PATENT-APPL-SN-680958	.....	c74	N78-18905	US-PATENT-APPL-SN-696989	.....	c27	N77-30237
US-PATENT-APPL-SN-681000	.....	c34	N78-25350	US-PATENT-APPL-SN-697075	.....	c15	N71-27184
US-PATENT-APPL-SN-681001	.....	c74	N76-22593	US-PATENT-APPL-SN-697341	.....	c09	N71-23188
US-PATENT-APPL-SN-681017	.....	c44	N77-32583	US-PATENT-APPL-SN-698239	.....	c33	N78-17294
US-PATENT-APPL-SN-681096	.....	c44	N77-32582	US-PATENT-APPL-SN-698592	.....	c15	N71-18580
US-PATENT-APPL-SN-681687	.....	c03	N71-20273	US-PATENT-APPL-SN-698629	.....	c09	N71-12516
US-PATENT-APPL-SN-681692	.....	c08	N71-12506	US-PATENT-APPL-SN-698630	.....	c09	N71-24841
US-PATENT-APPL-SN-681693	.....	c09	N71-18598	US-PATENT-APPL-SN-698646	.....	c24	N78-15180
US-PATENT-APPL-SN-681942	.....	c18	N71-15688	US-PATENT-APPL-SN-699002	.....	c32	N78-15323
US-PATENT-APPL-SN-682416	.....	c34	N77-24423	US-PATENT-APPL-SN-699012	.....	c33	N78-27326
US-PATENT-APPL-SN-682435	.....	c27	N77-32308	US-PATENT-APPL-SN-700040	.....	c18	N72-23581
US-PATENT-APPL-SN-683073	.....	c44	N81-29525	US-PATENT-APPL-SN-700120	.....	c15	N71-20440
US-PATENT-APPL-SN-683507	.....	c15	N71-15609	US-PATENT-APPL-SN-700142	.....	c21	N71-14159
US-PATENT-APPL-SN-683606	.....	c09	N71-24717	US-PATENT-APPL-SN-700174	.....	c02	N71-20570
US-PATENT-APPL-SN-683612	.....	c01	N69-39981	US-PATENT-APPL-SN-700467	.....	c52	N79-14749
US-PATENT-APPL-SN-683613	.....	c15	N71-15610	US-PATENT-APPL-SN-700541	.....	c10	N71-25139
US-PATENT-APPL-SN-684045	.....	c07	N80-26298	US-PATENT-APPL-SN-700586	.....	c15	N71-19570
US-PATENT-APPL-SN-684083	.....	c09	N71-24596	US-PATENT-APPL-SN-700673	.....	c39	N77-28511
US-PATENT-APPL-SN-684171	.....	c26	N78-18183	US-PATENT-APPL-SN-700984	.....	c11	N71-19494
US-PATENT-APPL-SN-684178	.....	c15	N71-23812	US-PATENT-APPL-SN-700985	.....	c15	N69-23190
US-PATENT-APPL-SN-684209	.....	c10	N71-19418	US-PATENT-APPL-SN-700986	.....	c12	N71-26387
US-PATENT-APPL-SN-684807	.....	c75	N78-27913	US-PATENT-APPL-SN-700987	.....	c09	N71-19610
US-PATENT-APPL-SN-684810	.....	c33	N76-23483	US-PATENT-APPL-SN-701244	.....	c05	N72-20096
US-PATENT-APPL-SN-684894	.....	c17	N71-26773	US-PATENT-APPL-SN-701448	.....	c52	N78-10686
US-PATENT-APPL-SN-685027	.....	c25	N78-10225	US-PATENT-APPL-SN-701635	.....	c12	N71-17578
US-PATENT-APPL-SN-685463	.....	c15	N71-23254	US-PATENT-APPL-SN-701654	.....	c03	N71-11049
US-PATENT-APPL-SN-685473	.....	c17	N71-16044	US-PATENT-APPL-SN-701679	.....	c02	N71-19287
US-PATENT-APPL-SN-685497	.....	c07	N69-39974	US-PATENT-APPL-SN-701679	.....	c07	N73-20174
US-PATENT-APPL-SN-685748	.....	c07	N71-11282	US-PATENT-APPL-SN-701732	.....	c24	N71-16095
US-PATENT-APPL-SN-685750	.....	c27	N71-16392	US-PATENT-APPL-SN-701733	.....	c10	N71-24844
US-PATENT-APPL-SN-685764	.....	c14	N69-27459	US-PATENT-APPL-SN-701744	.....	c21	N71-13958
US-PATENT-APPL-SN-685766	.....	c15	N69-21924	US-PATENT-APPL-SN-701767	.....	c07	N71-26101
US-PATENT-APPL-SN-685787	.....	c14	N71-18625	US-PATENT-APPL-SN-702115	.....	c71	N79-14871
US-PATENT-APPL-SN-686209	.....	c15	N71-23809	US-PATENT-APPL-SN-702396	.....	c31	N71-16345
US-PATENT-APPL-SN-686248	.....	c14	N71-26774	US-PATENT-APPL-SN-702911	.....	c15	N71-24875
US-PATENT-APPL-SN-686296	.....	c18	N71-14014	US-PATENT-APPL-SN-702967	.....	c06	N71-24739
US-PATENT-APPL-SN-686331	.....	c38	N78-32447	US-PATENT-APPL-SN-703107	.....	c37	N77-22479
US-PATENT-APPL-SN-686344	.....	c15	N71-17688	US-PATENT-APPL-SN-703905	.....	c32	N80-14281
US-PATENT-APPL-SN-686449	.....	c34	N78-18355	US-PATENT-APPL-SN-704180	.....	c36	N78-27402
US-PATENT-APPL-SN-686796	.....	c15	N70-33311	US-PATENT-APPL-SN-704224	.....	c18	N71-15469
US-PATENT-APPL-SN-686933	.....	c14	N71-17588	US-PATENT-APPL-SN-704299	.....	c10	N71-26577
US-PATENT-APPL-SN-687251	.....	c52	N79-12694	US-PATENT-APPL-SN-704420	.....	c05	N71-11202
US-PATENT-APPL-SN-687822	.....	c44	N78-14625	US-PATENT-APPL-SN-704446	.....	c10	N71-33407
US-PATENT-APPL-SN-688742	.....	c15	N71-20441	US-PATENT-APPL-SN-704465	.....	c07	N71-24741
US-PATENT-APPL-SN-688743	.....	c15	N71-20393	US-PATENT-APPL-SN-704468	.....	c25	N79-28253
US-PATENT-APPL-SN-688805	.....	c14	N71-17701	US-PATENT-APPL-SN-704668	.....	c10	N71-12554
US-PATENT-APPL-SN-688807	.....	c03	N71-23239	US-PATENT-APPL-SN-706013	.....	c33	N71-27862
US-PATENT-APPL-SN-688852	.....	c44	N78-28594	US-PATENT-APPL-SN-706073	.....	c76	N79-11920
US-PATENT-APPL-SN-688854	.....	c54	N77-32722	US-PATENT-APPL-SN-706424	.....	c27	N78-32256
US-PATENT-APPL-SN-688856	.....	c54	N78-32720	US-PATENT-APPL-SN-706424	.....	c27	N80-10358
US-PATENT-APPL-SN-688868	.....	c15	N71-17686	US-PATENT-APPL-SN-706424	.....	c27	N80-24438
US-PATENT-APPL-SN-689455	.....	c54	N74-32546	US-PATENT-APPL-SN-706425	.....	c33	N78-10376
US-PATENT-APPL-SN-690163	.....	c14	N71-18465	US-PATENT-APPL-SN-706564	.....	c14	N71-17587
US-PATENT-APPL-SN-690172	.....	c11	N72-22245	US-PATENT-APPL-SN-707124	.....	c44	N77-22606
US-PATENT-APPL-SN-690815	.....	c32	N77-24328	US-PATENT-APPL-SN-707125	.....	c39	N78-16387
US-PATENT-APPL-SN-690816	.....	c37	N78-25426	US-PATENT-APPL-SN-707440	.....	c06	N73-30102
US-PATENT-APPL-SN-690997	.....	c16	N71-24828	US-PATENT-APPL-SN-707495	.....	c11	N71-18773
US-PATENT-APPL-SN-690998	.....	c30	N71-15990	US-PATENT-APPL-SN-708658	.....	c33	N77-26385
US-PATENT-APPL-SN-691046	.....	c36	N77-25501	US-PATENT-APPL-SN-708660	.....	c34	N78-27357
US-PATENT-APPL-SN-691256	.....	c35	N77-31465	US-PATENT-APPL-SN-708771	.....	c26	N78-24333
US-PATENT-APPL-SN-691735	.....	c09	N71-12520	US-PATENT-APPL-SN-708795	.....	c37	N77-28487
US-PATENT-APPL-SN-691736	.....	c18	N71-16210	US-PATENT-APPL-SN-708796	.....	c36	N78-18410
US-PATENT-APPL-SN-691737	.....	c07	N71-24742	US-PATENT-APPL-SN-708800	.....	c54	N78-17676
US-PATENT-APPL-SN-691738	.....	c08	N71-18694	US-PATENT-APPL-SN-708951	.....	c27	N78-31232
US-PATENT-APPL-SN-691739	.....	c32	N71-15974	US-PATENT-APPL-SN-709398	.....	c06	N71-13461
US-PATENT-APPL-SN-691909	.....	c05	N71-24606	US-PATENT-APPL-SN-709399	.....	c16	N71-26154
US-PATENT-APPL-SN-691936	.....	c26	N77-32279	US-PATENT-APPL-SN-709415	.....	c44	N78-27515
US-PATENT-APPL-SN-692284	.....	c27	N78-14164	US-PATENT-APPL-SN-709622	.....	c33	N71-24858
US-PATENT-APPL-SN-692331	.....	c10	N71-26326	US-PATENT-APPL-SN-709849	.....	c52	N77-25772
US-PATENT-APPL-SN-692332	.....	c07	N71-11281	US-PATENT-APPL-SN-710032	.....	c54	N77-30749
US-PATENT-APPL-SN-692413	.....	c25	N78-25148	US-PATENT-APPL-SN-710035	.....	c44	N78-24608
US-PATENT-APPL-SN-692414	.....	c32	N77-24331	US-PATENT-APPL-SN-710036	.....	c44	N78-32539
US-PATENT-APPL-SN-692471	.....	c09	N71-12518	US-PATENT-APPL-SN-710533	.....	c02	N71-11043
US-PATENT-APPL-SN-692636	.....	c27	N81-24258	US-PATENT-APPL-SN-710561	.....	c09	N71-12517
US-PATENT-APPL-SN-693074	.....	c44	N78-24609	US-PATENT-APPL-SN-710562	.....	c31	N71-16085
US-PATENT-APPL-SN-693419	.....	c31	N71-16222	US-PATENT-APPL-SN-710621	.....	c06	N73-27086
US-PATENT-APPL-SN-693420	.....	c31	N71-16080	US-PATENT-APPL-SN-710945	.....	c33	N71-15568
US-PATENT-APPL-SN-694246	c15	N71-26673	US-PATENT-APPL-SN-710949	c12	N71-17631
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US-PATENT-APPL-SN-694317	c12	N71-20436	US-PATENT-APPL-SN-711903	c18	N71-26772
US-PATENT-APPL-SN-694340	.....	c11	N71-17600	US-PATENT-APPL-SN-711921	.....	c18	N71-16105
US-PATENT-APPL-SN-694345	.....	c10	N71-23669	US-PATENT-APPL-SN-711970	.....	c09	N71-18830

US-PATENT-APPL-SN-711971	.....	c09	N71-23598	US-PATENT-APPL-SN-735911	.....	c14	N70-41946
US-PATENT-APPL-SN-711972	.....	c06	N71-24607	US-PATENT-APPL-SN-736286	.....	c32	N79-11265
US-PATENT-APPL-SN-712065	.....	c08	N71-12503	US-PATENT-APPL-SN-736848	.....	c23	N71-16212
US-PATENT-APPL-SN-712099	.....	c23	N71-24668	US-PATENT-APPL-SN-736909	.....	c37	N79-11404
US-PATENT-APPL-SN-712270	.....	c52	N79-27836	US-PATENT-APPL-SN-736910	.....	c27	N78-32260
US-PATENT-APPL-SN-712419	.....	c35	N78-14364	US-PATENT-APPL-SN-737974	.....	c33	N78-18308
US-PATENT-APPL-SN-712658	.....	c07	N71-19773	US-PATENT-APPL-SN-738119	.....	c18	N71-15545
US-PATENT-APPL-SN-712981	.....	c31	N78-25256	US-PATENT-APPL-SN-738218	.....	c37	N78-27425
US-PATENT-APPL-SN-713027	.....	c37	N79-10419	US-PATENT-APPL-SN-738314	.....	c12	N71-17573
US-PATENT-APPL-SN-713162	.....	c06	N71-26754	US-PATENT-APPL-SN-738315	.....	c14	N71-27334
US-PATENT-APPL-SN-713188	.....	c08	N71-33110	US-PATENT-APPL-SN-738315	.....	c14	N72-31446
US-PATENT-APPL-SN-713616	.....	c06	N71-27363	US-PATENT-APPL-SN-739072	.....	c33	N75-27251
US-PATENT-APPL-SN-714158	.....	c33	N78-13320	US-PATENT-APPL-SN-739391	.....	c09	N72-17156
US-PATENT-APPL-SN-714296	.....	c14	N71-15604	US-PATENT-APPL-SN-739908	.....	c15	N78-25119
US-PATENT-APPL-SN-714595	.....	c15	N71-17822	US-PATENT-APPL-SN-739909	.....	c37	N78-24545
US-PATENT-APPL-SN-715485	.....	c74	N78-14889	US-PATENT-APPL-SN-739914	.....	c33	N78-10375
US-PATENT-APPL-SN-715975	.....	c06	N71-11240	US-PATENT-APPL-SN-739915	.....	c37	N78-24544
US-PATENT-APPL-SN-716183	.....	c15	N71-18132	US-PATENT-APPL-SN-739927	.....	c32	N71-16103
US-PATENT-APPL-SN-716734	.....	c15	N71-17628	US-PATENT-APPL-SN-740153	.....	c28	N79-11231
US-PATENT-APPL-SN-716795	.....	c14	N71-20435	US-PATENT-APPL-SN-740155	.....	c74	N78-27904
US-PATENT-APPL-SN-716885	.....	c74	N78-33913	US-PATENT-APPL-SN-740156	.....	c71	N78-14867
US-PATENT-APPL-SN-717052	.....	c14	N71-17626	US-PATENT-APPL-SN-740457	.....	c35	N78-32395
US-PATENT-APPL-SN-717319	.....	c44	N77-31601	US-PATENT-APPL-SN-741056	.....	c07	N81-19116
US-PATENT-APPL-SN-717320	.....	c44	N78-15560	US-PATENT-APPL-SN-741461	.....	c12	N71-18603
US-PATENT-APPL-SN-717822	.....	c09	N71-25866	US-PATENT-APPL-SN-741749	.....	c52	N79-14751
US-PATENT-APPL-SN-718095	.....	c28	N70-39899	US-PATENT-APPL-SN-741824	.....	c07	N71-12389
US-PATENT-APPL-SN-718137	.....	c44	N78-31527	US-PATENT-APPL-SN-742034	.....	c33	N78-10377
US-PATENT-APPL-SN-718244	.....	c05	N78-32086	US-PATENT-APPL-SN-742816	.....	c14	N71-17656
US-PATENT-APPL-SN-718266	.....	c74	N78-17667	US-PATENT-APPL-SN-743249	.....	c35	N77-32456
US-PATENT-APPL-SN-718267	.....	c26	N77-29260	US-PATENT-APPL-SN-743429	.....	c07	N71-11285
US-PATENT-APPL-SN-718268	.....	c44	N78-33526	US-PATENT-APPL-SN-743525	.....	c07	N71-28430
US-PATENT-APPL-SN-718279	.....	c15	N71-26312	US-PATENT-APPL-SN-744477	.....	c33	N78-25319
US-PATENT-APPL-SN-718689	.....	c14	N71-17655	US-PATENT-APPL-SN-744522	.....	c33	N77-21314
US-PATENT-APPL-SN-718752	.....	c03	N71-18698	US-PATENT-APPL-SN-744573	.....	c44	N78-25531
US-PATENT-APPL-SN-718769	.....	c14	N71-17662	US-PATENT-APPL-SN-744574	.....	c25	N78-14104
US-PATENT-APPL-SN-719029	.....	c14	N71-27186	US-PATENT-APPL-SN-744577	.....	c35	N79-10391
US-PATENT-APPL-SN-719173	.....	c28	N70-33331	US-PATENT-APPL-SN-744910	.....	c15	N71-17649
US-PATENT-APPL-SN-719869	.....	c31	N71-15676	US-PATENT-APPL-SN-745337	.....	c28	N72-20758
US-PATENT-APPL-SN-719870	.....	c07	N71-26292	US-PATENT-APPL-SN-745384	.....	c25	N79-11151
US-PATENT-APPL-SN-720041	.....	c05	N71-27234	US-PATENT-APPL-SN-745766	.....	c37	N79-11403
US-PATENT-APPL-SN-720125	.....	c09	N71-12539	US-PATENT-APPL-SN-745852	.....	c12	N71-17661
US-PATENT-APPL-SN-720521	.....	c44	N78-25530	US-PATENT-APPL-SN-746269	.....	c44	N78-25528
US-PATENT-APPL-SN-720546	.....	c18	N72-17532	US-PATENT-APPL-SN-746578	.....	c12	N79-26075
US-PATENT-APPL-SN-721150	.....	c37	N78-17383	US-PATENT-APPL-SN-746579	.....	c33	N81-27397
US-PATENT-APPL-SN-721607	.....	c18	N71-25681	US-PATENT-APPL-SN-746580	.....	c34	N78-17335
US-PATENT-APPL-SN-723264	c24	N78-10214	US-PATENT-APPL-SN-747674	c27	N80-26446
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US-PATENT-APPL-SN-723465	c15	N72-29488	US-PATENT-APPL-SN-749121	c07	N72-11149
US-PATENT-APPL-SN-723465	.....	c37	N74-15125	US-PATENT-APPL-SN-749148	.....	c10	N71-19421
US-PATENT-APPL-SN-723476	.....	c05	N71-12341	US-PATENT-APPL-SN-749149	.....	c15	N71-24897
US-PATENT-APPL-SN-723488	.....	c09	N71-28691	US-PATENT-APPL-SN-749181	.....	c09	N71-24803
US-PATENT-APPL-SN-723804	.....	c09	N71-24806	US-PATENT-APPL-SN-749320	.....	c14	N72-22443
US-PATENT-APPL-SN-723805	.....	c10	N71-26339	US-PATENT-APPL-SN-749420	.....	c04	N77-12031
US-PATENT-APPL-SN-723827	.....	c10	N71-27137	US-PATENT-APPL-SN-749548	.....	c10	N71-33129
US-PATENT-APPL-SN-724551	.....	c15	N71-17696	US-PATENT-APPL-SN-750031	.....	c05	N73-32012
US-PATENT-APPL-SN-724674	.....	c76	N78-24950	US-PATENT-APPL-SN-750235	.....	c25	N75-14844
US-PATENT-APPL-SN-725405	.....	c15	N71-26134	US-PATENT-APPL-SN-750655	.....	c74	N78-32854
US-PATENT-APPL-SN-725432	.....	c07	N71-24622	US-PATENT-APPL-SN-750786	.....	c07	N71-27341
US-PATENT-APPL-SN-725475	.....	c31	N71-15643	US-PATENT-APPL-SN-750787	.....	c10	N71-27126
US-PATENT-APPL-SN-725719	.....	c15	N71-26243	US-PATENT-APPL-SN-750792	.....	c37	N79-11402
US-PATENT-APPL-SN-726898	.....	c12	N71-17579	US-PATENT-APPL-SN-750798	.....	c85	N79-17747
US-PATENT-APPL-SN-727444	.....	c31	N81-15154	US-PATENT-APPL-SN-751061	.....	c18	N71-29040
US-PATENT-APPL-SN-727480	.....	c14	N71-17658	US-PATENT-APPL-SN-751198	.....	c03	N71-24718
US-PATENT-APPL-SN-727503	.....	c08	N81-19130	US-PATENT-APPL-SN-751215	.....	c22	N72-20597
US-PATENT-APPL-SN-728234	.....	c03	N71-12255	US-PATENT-APPL-SN-751266	.....	c15	N71-33518
US-PATENT-APPL-SN-728369	.....	c52	N76-33835	US-PATENT-APPL-SN-752050	.....	c07	N81-19115
US-PATENT-APPL-SN-729299	.....	c03	N72-15986	US-PATENT-APPL-SN-752729	.....	c09	N71-26787
US-PATENT-APPL-SN-730045	.....	c32	N78-24391	US-PATENT-APPL-SN-752748	.....	c35	N78-25391
US-PATENT-APPL-SN-730046	.....	c35	N78-32396	US-PATENT-APPL-SN-752946	.....	c15	N71-29032
US-PATENT-APPL-SN-730162	.....	c09	N71-18599	US-PATENT-APPL-SN-752947	.....	c31	N71-15689
US-PATENT-APPL-SN-730468	.....	c25	N79-11152	US-PATENT-APPL-SN-753103	.....	c37	N80-14397
US-PATENT-APPL-SN-730700	.....	c07	N71-24583	US-PATENT-APPL-SN-753452	.....	c07	N79-14096
US-PATENT-APPL-SN-730701	.....	c12	N71-18615	US-PATENT-APPL-SN-753964	.....	c24	N78-27180
US-PATENT-APPL-SN-730702	c33	N71-16356	US-PATENT-APPL-SN-753965	c54	N78-31735
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US-PATENT-APPL-SN-803822	c26 N80-32484	US-PATENT-APPL-SN-826326	c46 N79-22679
US-PATENT-APPL-SN-803823	c44 N79-11467	US-PATENT-APPL-SN-827464	c74 N79-34011
US-PATENT-APPL-SN-804035	c35 N79-14348	US-PATENT-APPL-SN-827579	c15 N71-24984
US-PATENT-APPL-SN-804172	c28 N71-26781	US-PATENT-APPL-SN-827597	c26 N69-33482
US-PATENT-APPL-SN-805296	c10 N71-25899	US-PATENT-APPL-SN-828262	c37 N79-14383
US-PATENT-APPL-SN-805405	c14 N71-27323	US-PATENT-APPL-SN-828909	c28 N71-27094
US-PATENT-APPL-SN-805406	c07 N71-24613	US-PATENT-APPL-SN-828920	c35 N74-22095
US-PATENT-APPL-SN-805549	c35 N79-16246	US-PATENT-APPL-SN-828921	c09 N71-27001
US-PATENT-APPL-SN-806149	c27 N71-16223	US-PATENT-APPL-SN-828983	c03 N71-24719
US-PATENT-APPL-SN-806226	c14 N71-27407	US-PATENT-APPL-SN-828984	c08 N71-29033
US-PATENT-APPL-SN-806440	c51 N79-10694	US-PATENT-APPL-SN-829314	c09 N79-31228
US-PATENT-APPL-SN-807597	c52 N80-16725	US-PATENT-APPL-SN-829315	c34 N79-20336

US-PATENT-APPL-SN-829316	.....	c18 N79-11108	US-PATENT-APPL-SN-847277	.....	c31 N79-28370
US-PATENT-APPL-SN-829317	.....	c52 N80-18690	US-PATENT-APPL-SN-847278	.....	c34 N79-20335
US-PATENT-APPL-SN-829318	.....	c52 N80-14684	US-PATENT-APPL-SN-847596	.....	c15 N70-10867
US-PATENT-APPL-SN-829390	.....	c44 N79-11469	US-PATENT-APPL-SN-847815	.....	c52 N75-15270
US-PATENT-APPL-SN-829390	.....	c44 N80-16452	US-PATENT-APPL-SN-848282	.....	c15 N72-21462
US-PATENT-APPL-SN-829825	.....	c03 N71-24681	US-PATENT-APPL-SN-848325	.....	c06 N70-11251
US-PATENT-APPL-SN-830272	.....	c33 N81-29342	US-PATENT-APPL-SN-848351	.....	c06 N70-11252
US-PATENT-APPL-SN-830366	.....	c16 N72-13437	US-PATENT-APPL-SN-848403	.....	c33 N74-20859
US-PATENT-APPL-SN-830382	.....	c44 N77-31611	US-PATENT-APPL-SN-848403	.....	c36 N75-27364
US-PATENT-APPL-SN-830458	.....	c46 N79-23555	US-PATENT-APPL-SN-848418	.....	c43 N79-26439
US-PATENT-APPL-SN-830562	.....	c39 N80-10507	US-PATENT-APPL-SN-848419	.....	c43 N80-23711
US-PATENT-APPL-SN-830715	.....	c15 N71-24903	US-PATENT-APPL-SN-848420	.....	c43 N79-25443
US-PATENT-APPL-SN-830846	.....	c31 N80-32584	US-PATENT-APPL-SN-848421	.....	c43 N80-14423
US-PATENT-APPL-SN-830978	.....	c28 N71-26173	US-PATENT-APPL-SN-848428	.....	c25 N78-25149
US-PATENT-APPL-SN-831118	.....	c08 N72-11172	US-PATENT-APPL-SN-848481	.....	c17 N70-33283
US-PATENT-APPL-SN-831631	.....	c32 N79-20297	US-PATENT-APPL-SN-848776	.....	c07 N72-22127
US-PATENT-APPL-SN-831632	.....	c07 N80-26298	US-PATENT-APPL-SN-848793	.....	c43 N79-31706
US-PATENT-APPL-SN-831633	.....	c05 N80-14107	US-PATENT-APPL-SN-848794	.....	c44 N79-24431
US-PATENT-APPL-SN-831634	.....	c05 N79-12061	US-PATENT-APPL-SN-848805	.....	c06 N72-17095
US-PATENT-APPL-SN-832603	.....	c09 N72-22199	US-PATENT-APPL-SN-848810	.....	c07 N72-11148
US-PATENT-APPL-SN-833049	.....	c06 N72-21094	US-PATENT-APPL-SN-848811	.....	c10 N71-26142
US-PATENT-APPL-SN-833637	.....	c33 N79-24257	US-PATENT-APPL-SN-849106	.....	c09 N72-22197
US-PATENT-APPL-SN-834257	.....	c32 N80-14281	US-PATENT-APPL-SN-849274	.....	c28 N79-14228
US-PATENT-APPL-SN-835058	.....	c21 N72-22619	US-PATENT-APPL-SN-850504	.....	c52 N81-14613
US-PATENT-APPL-SN-835059	.....	c09 N71-26133	US-PATENT-APPL-SN-850504	.....	c52 N81-29764
US-PATENT-APPL-SN-835060	.....	c02 N71-26110	US-PATENT-APPL-SN-850507	.....	c25 N79-14169
US-PATENT-APPL-SN-835146	.....	c15 N70-33264	US-PATENT-APPL-SN-850586	.....	c31 N71-25434
US-PATENT-APPL-SN-835152	.....	c28 N70-38199	US-PATENT-APPL-SN-850587	.....	c08 N72-21199
US-PATENT-APPL-SN-835153	.....	c31 N71-17680	US-PATENT-APPL-SN-851298	.....	c15 N72-12409
US-PATENT-APPL-SN-835419	.....	c33 N80-18285	US-PATENT-APPL-SN-851394	.....	c09 N71-24892
US-PATENT-APPL-SN-835544	.....	c33 N79-14305	US-PATENT-APPL-SN-852131	.....	c15 N71-24836
US-PATENT-APPL-SN-835628	.....	c35 N79-14347	US-PATENT-APPL-SN-852843	.....	c09 N72-22195
US-PATENT-APPL-SN-836280	.....	c14 N73-14428	US-PATENT-APPL-SN-853349	.....	c35 N81-33448
US-PATENT-APPL-SN-836280	.....	c35 N75-25122	US-PATENT-APPL-SN-853641	.....	c33 N72-25913
US-PATENT-APPL-SN-836367	.....	c09 N71-24804	US-PATENT-APPL-SN-853677	.....	c34 N79-31523
US-PATENT-APPL-SN-837259	.....	c54 N79-24652	US-PATENT-APPL-SN-853679	.....	c35 N79-14346
US-PATENT-APPL-SN-837260	.....	c37 N78-27423	US-PATENT-APPL-SN-853705	.....	c45 N79-12584
US-PATENT-APPL-SN-837377	.....	c15 N71-26148	US-PATENT-APPL-SN-853716	.....	c09 N71-24904
US-PATENT-APPL-SN-837378	.....	c15 N71-24665	US-PATENT-APPL-SN-853746	.....	c02 N72-11018
US-PATENT-APPL-SN-837513	.....	c44 N81-29525	US-PATENT-APPL-SN-853763	.....	c07 N70-12616
US-PATENT-APPL-SN-837794	.....	c28 N80-20402	US-PATENT-APPL-SN-853763	.....	c07 N72-33146
US-PATENT-APPL-SN-837794	.....	c28 N81-14103	US-PATENT-APPL-SN-853855	.....	c17 N72-22530
US-PATENT-APPL-SN-837795	.....	c36 N80-14384	US-PATENT-APPL-SN-853855	.....	c17 N72-28535
US-PATENT-APPL-SN-837796	.....	c35 N79-14345	US-PATENT-APPL-SN-853856	.....	c16 N71-29131
US-PATENT-APPL-SN-837825	.....	c15 N71-27006	US-PATENT-APPL-SN-853983	.....	c14 N70-33254
US-PATENT-APPL-SN-837830	.....	c02 N71-27088	US-PATENT-APPL-SN-853984	.....	c21 N70-33181
US-PATENT-APPL-SN-838278	.....	c60 N74-20836	US-PATENT-APPL-SN-854815	.....	c09 N71-24807
US-PATENT-APPL-SN-838308	.....	c52 N80-27072	US-PATENT-APPL-SN-854920	.....	c15 N79-26100
US-PATENT-APPL-SN-838336	.....	c44 N79-11470	US-PATENT-APPL-SN-855004	.....	c24 N72-11595
US-PATENT-APPL-SN-838337	.....	c31 N79-17029	US-PATENT-APPL-SN-855364	.....	c52 N81-27783
US-PATENT-APPL-SN-838630	.....	c14 N71-28993	US-PATENT-APPL-SN-856253	.....	c24 N74-19769
US-PATENT-APPL-SN-839934	.....	c07 N72-20140	US-PATENT-APPL-SN-856258	.....	c05 N71-17599
US-PATENT-APPL-SN-839935	.....	c15 N71-24895	US-PATENT-APPL-SN-856279	.....	c07 N72-21118
US-PATENT-APPL-SN-839941	.....	c07 N71-26181	US-PATENT-APPL-SN-856282	.....	c08 N72-22166
US-PATENT-APPL-SN-839963	.....	c27 N79-33316	US-PATENT-APPL-SN-856327	.....	c05 N72-16015
US-PATENT-APPL-SN-839963	.....	c27 N81-14078	US-PATENT-APPL-SN-856328	.....	c14 N72-22441
US-PATENT-APPL-SN-839994	.....	c28 N71-28915	US-PATENT-APPL-SN-856415	.....	c09 N71-26182
US-PATENT-APPL-SN-840176	.....	c28 N71-27095	US-PATENT-APPL-SN-856460	.....	c25 N79-24073
US-PATENT-APPL-SN-840308	.....	c07 N71-33613	US-PATENT-APPL-SN-856461	.....	c34 N79-12359
US-PATENT-APPL-SN-840359	.....	c23 N71-29125	US-PATENT-APPL-SN-856462	.....	c34 N80-24573
US-PATENT-APPL-SN-840870	.....	c15 N71-26189	US-PATENT-APPL-SN-856462	.....	c44 N81-24519
US-PATENT-APPL-SN-840983	.....	c05 N70-33285	US-PATENT-APPL-SN-856464	.....	c36 N79-14362
US-PATENT-APPL-SN-841278	.....	c33 N77-21316	US-PATENT-APPL-SN-856465	.....	c44 N80-14473
US-PATENT-APPL-SN-841845	.....	c14 N73-32317	US-PATENT-APPL-SN-856466	.....	c72 N80-14877
US-PATENT-APPL-SN-842170	.....	c11 N70-33278	US-PATENT-APPL-SN-857241	.....	c46 N74-23069
US-PATENT-APPL-SN-842171	.....	c11 N70-33329	US-PATENT-APPL-SN-857445	.....	c05 N71-24728
US-PATENT-APPL-SN-843022	.....	c11 N70-33287	US-PATENT-APPL-SN-857967	.....	c15 N72-20443
US-PATENT-APPL-SN-843032	.....	c28 N70-41818	US-PATENT-APPL-SN-858596	.....	c35 N78-18395
US-PATENT-APPL-SN-843090	.....	c27 N79-22300	US-PATENT-APPL-SN-858695	.....	c11 N72-22247
US-PATENT-APPL-SN-843251	.....	c03 N72-11062	US-PATENT-APPL-SN-858762	.....	c08 N79-23097
US-PATENT-APPL-SN-843308	.....	c32 N79-14268	US-PATENT-APPL-SN-858764	.....	c33 N79-10338
US-PATENT-APPL-SN-844225	.....	c05 N72-25120	US-PATENT-APPL-SN-858765	.....	c33 N79-11313
US-PATENT-APPL-SN-844243	.....	c37 N75-29426	US-PATENT-APPL-SN-858766	.....	c27 N79-14213
US-PATENT-APPL-SN-844315	.....	c35 N77-21392	US-PATENT-APPL-SN-858767	.....	c32 N78-18266
US-PATENT-APPL-SN-844344	.....	c24 N79-14156	US-PATENT-APPL-SN-858769	.....	c44 N78-19609
US-PATENT-APPL-SN-844346	.....	c44 N79-11472	US-PATENT-APPL-SN-858936	.....	c07 N80-18039
US-PATENT-APPL-SN-844355	.....	c03 N72-26031	US-PATENT-APPL-SN-858950	.....	c35 N78-17359
US-PATENT-APPL-SN-845365	.....	c09 N71-13518	US-PATENT-APPL-SN-860404	.....	c37 N81-15364
US-PATENT-APPL-SN-845584	.....	c27 N73-22710	US-PATENT-APPL-SN-860405	.....	c26 N79-22271
US-PATENT-APPL-SN-845807	.....	c15 N72-11391	US-PATENT-APPL-SN-860406	.....	c24 N79-17916
US-PATENT-APPL-SN-845971	.....	c11 N71-28629	US-PATENT-APPL-SN-860492	.....	c09 N72-20199
US-PATENT-APPL-SN-845972	.....	c09 N70-11148	US-PATENT-APPL-SN-860493	.....	c14 N72-16283
US-PATENT-APPL-SN-845973	.....	c11 N71-24985	US-PATENT-APPL-SN-860635	.....	c28 N72-17843
US-PATENT-APPL-SN-845974	.....	c33 N71-25353	US-PATENT-APPL-SN-860750	.....	c08 N72-22165
US-PATENT-APPL-SN-845990	.....	c14 N71-27005	US-PATENT-APPL-SN-860751	.....	c08 N72-18184
US-PATENT-APPL-SN-845991	.....	c14 N71-29134	US-PATENT-APPL-SN-860781	.....	c18 N72-22567
US-PATENT-APPL-SN-847023	.....	c31 N70-37538	US-PATENT-APPL-SN-861152	.....	c14 N70-33322
US-PATENT-APPL-SN-847027	.....	c03 N70-33343	US-PATENT-APPL-SN-861389	.....	c03 N78-25070
US-PATENT-APPL-SN-847276	.....	c37 N81-32510	US-PATENT-APPL-SN-861390	.....	c28 N79-28342

US-PATENT-APPL-SN-861391	c44	N79-12541	US-PATENT-APPL-SN-883090	c44	N80-29834
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US-PATENT-APPL-SN-861396	c35	N79-14349	US-PATENT-APPL-SN-883523	c09	N72-33204
US-PATENT-APPL-SN-861649	.....	c14	N72-17327	US-PATENT-APPL-SN-883524	.....	c09	N72-21246
US-PATENT-APPL-SN-862878	.....	c02	N81-14567	US-PATENT-APPL-SN-883961	.....	c25	N80-16116
US-PATENT-APPL-SN-862880	.....	c24	N79-31347	US-PATENT-APPL-SN-885049	.....	c33	N79-23345
US-PATENT-APPL-SN-862921	.....	c31	N71-29050	US-PATENT-APPL-SN-885065	.....	c35	N79-18296
US-PATENT-APPL-SN-863024	.....	c46	N80-14603	US-PATENT-APPL-SN-885066	.....	c33	N80-26599
US-PATENT-APPL-SN-863276	.....	c16	N72-12440	US-PATENT-APPL-SN-885067	.....	c33	N79-28415
US-PATENT-APPL-SN-863280	.....	c24	N72-33681	US-PATENT-APPL-SN-885521	.....	c03	N72-28025
US-PATENT-APPL-SN-863770	.....	c44	N79-18444	US-PATENT-APPL-SN-885571	.....	c09	N71-28886
US-PATENT-APPL-SN-863773	.....	c44	N79-26475	US-PATENT-APPL-SN-885594	.....	c15	N71-29133
US-PATENT-APPL-SN-863913	.....	c14	N71-28991	US-PATENT-APPL-SN-887685	.....	c10	N72-20223
US-PATENT-APPL-SN-863914	.....	c09	N72-31235	US-PATENT-APPL-SN-887698	.....	c09	N72-17153
US-PATENT-APPL-SN-863963	.....	c10	N71-26085	US-PATENT-APPL-SN-887699	.....	c15	N72-17452
US-PATENT-APPL-SN-863967	.....	c11	N71-27036	US-PATENT-APPL-SN-887700	.....	c07	N71-28980
US-PATENT-APPL-SN-864020	.....	c15	N72-17454	US-PATENT-APPL-SN-887701	.....	c08	N71-29034
US-PATENT-APPL-SN-864039	.....	c15	N72-22483	US-PATENT-APPL-SN-888362	.....	c33	N80-14330
US-PATENT-APPL-SN-864057	.....	c07	N71-33606	US-PATENT-APPL-SN-888432	.....	c74	N81-17886
US-PATENT-APPL-SN-865106	.....	c09	N72-22202	US-PATENT-APPL-SN-888434	.....	c51	N78-22585
US-PATENT-APPL-SN-865109	.....	c14	N71-28933	US-PATENT-APPL-SN-889374	.....	c08	N72-25207
US-PATENT-APPL-SN-865274	.....	c09	N72-17155	US-PATENT-APPL-SN-889375	.....	c10	N72-20222
US-PATENT-APPL-SN-865298	.....	c15	N72-11388	US-PATENT-APPL-SN-889376	.....	c18	N71-26285
US-PATENT-APPL-SN-865329	.....	c15	N71-29132	US-PATENT-APPL-SN-889387	.....	c09	N71-29035
US-PATENT-APPL-SN-865811	.....	c09	N71-27053	US-PATENT-APPL-SN-889420	.....	c14	N72-25413
US-PATENT-APPL-SN-865909	.....	c14	N72-11364	US-PATENT-APPL-SN-889422	.....	c09	N72-25259
US-PATENT-APPL-SN-866442	.....	c25	N72-24753	US-PATENT-APPL-SN-889423	.....	c10	N72-22236
US-PATENT-APPL-SN-867841	.....	c11	N72-22246	US-PATENT-APPL-SN-889437	.....	c15	N72-11392
US-PATENT-APPL-SN-867842	.....	c23	N72-27728	US-PATENT-APPL-SN-889438	.....	c15	N72-18477
US-PATENT-APPL-SN-867843	.....	c14	N71-26161	US-PATENT-APPL-SN-889478	.....	c08	N71-29138
US-PATENT-APPL-SN-867851	.....	c15	N72-22484	US-PATENT-APPL-SN-889479	.....	c14	N72-17325
US-PATENT-APPL-SN-868249	.....	c33	N80-18286	US-PATENT-APPL-SN-889551	.....	c21	N72-21624
US-PATENT-APPL-SN-868445	c14	N72-17323	US-PATENT-APPL-SN-889554	c15	N72-20444
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US-PATENT-APPL-SN-868530	c05	N72-11084	US-PATENT-APPL-SN-889556	c14	N72-18411
US-PATENT-APPL-SN-868775	.....	c09	N72-25261	US-PATENT-APPL-SN-889557	.....	c11	N72-17183
US-PATENT-APPL-SN-868775	.....	c09	N73-27150	US-PATENT-APPL-SN-889558	.....	c15	N72-22491
US-PATENT-APPL-SN-869260	c05	N72-20097	US-PATENT-APPL-SN-889583	c15	N72-21464
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US-PATENT-APPL-SN-870689	c06	N72-25148	US-PATENT-APPL-SN-889670	c39	N72-25537
US-PATENT-APPL-SN-872602	c09	N72-22200	US-PATENT-APPL-SN-889671	c24	N81-14000
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US-PATENT-APPL-SN-873259	c08	N72-21200	US-PATENT-APPL-SN-891243	c44	N79-25482
US-PATENT-APPL-SN-873260	.....	c33	N72-17948	US-PATENT-APPL-SN-891244	.....	c05	N79-24976
US-PATENT-APPL-SN-873793	.....	c14	N72-21407	US-PATENT-APPL-SN-891356	.....	c35	N80-18359
US-PATENT-APPL-SN-874177	.....	c11	N72-25284	US-PATENT-APPL-SN-891358	.....	c44	N80-14474
US-PATENT-APPL-SN-874435	.....	c11	N71-33612	US-PATENT-APPL-SN-891370	.....	c20	N79-20179
US-PATENT-APPL-SN-874732	c09	N71-29139	US-PATENT-APPL-SN-891372	c37	N79-22474
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US-PATENT-APPL-SN-875849	c07	N71-33696	US-PATENT-APPL-SN-891875	c23	N78-22155
US-PATENT-APPL-SN-876299	.....	c44	N80-18552	US-PATENT-APPL-SN-893382	.....	c34	N79-24285
US-PATENT-APPL-SN-876431	.....	c33	N79-24254	US-PATENT-APPL-SN-893383	.....	c31	N81-27323
US-PATENT-APPL-SN-876432	.....	c36	N80-18372	US-PATENT-APPL-SN-893657	.....	c51	N80-27067
US-PATENT-APPL-SN-876438	.....	c52	N79-26772	US-PATENT-APPL-SN-893857	.....	c24	N81-17170
US-PATENT-APPL-SN-876440	.....	c51	N80-16714	US-PATENT-APPL-SN-893857	.....	c24	N81-26179
US-PATENT-APPL-SN-876441	.....	c74	N79-20856	US-PATENT-APPL-SN-893865	.....	c37	N81-24443
US-PATENT-APPL-SN-876588	.....	c15	N72-25452	US-PATENT-APPL-SN-893903	.....	c60	N81-15706
US-PATENT-APPL-SN-876588	.....	c25	N74-30502	US-PATENT-APPL-SN-894213	.....	c37	N80-23655
US-PATENT-APPL-SN-877717	.....	c14	N72-27410	US-PATENT-APPL-SN-896955	.....	c33	N78-25323
US-PATENT-APPL-SN-877717	.....	c14	N73-13417	US-PATENT-APPL-SN-897828	.....	c52	N81-29763
US-PATENT-APPL-SN-877990	.....	c14	N72-28437	US-PATENT-APPL-SN-897829	.....	c44	N79-25481
US-PATENT-APPL-SN-878253	.....	c25	N81-33246	US-PATENT-APPL-SN-897830	.....	c35	N80-21719
US-PATENT-APPL-SN-878539	.....	c35	N80-20560	US-PATENT-APPL-SN-897831	.....	c44	N80-20808
US-PATENT-APPL-SN-878540	.....	c05	N78-18045	US-PATENT-APPL-SN-897832	.....	c31	N78-24387
US-PATENT-APPL-SN-878541	.....	c33	N81-14220	US-PATENT-APPL-SN-897832	.....	c43	N81-26509
US-PATENT-APPL-SN-878542	.....	c33	N79-28416	US-PATENT-APPL-SN-897840	.....	c31	N81-14137
US-PATENT-APPL-SN-878730	.....	c08	N72-22164	US-PATENT-APPL-SN-899123	.....	c44	N79-14528
US-PATENT-APPL-SN-878731	.....	c15	N71-26162	US-PATENT-APPL-SN-899828	.....	c32	N80-18252
US-PATENT-APPL-SN-880246	.....	c28	N72-22770	US-PATENT-APPL-SN-900659	.....	c27	N81-17261
US-PATENT-APPL-SN-880247	.....	c09	N70-20737	US-PATENT-APPL-SN-900832	.....	c24	N78-25137
US-PATENT-APPL-SN-880248	.....	c07	N72-11150	US-PATENT-APPL-SN-900841	.....	c32	N78-25274
US-PATENT-APPL-SN-880249	.....	c15	N72-22482	US-PATENT-APPL-SN-900842	.....	c32	N79-24203
US-PATENT-APPL-SN-880250	.....	c03	N72-20032	US-PATENT-APPL-SN-900843	.....	c44	N80-20810
US-PATENT-APPL-SN-880271	.....	c15	N72-25448	US-PATENT-APPL-SN-901055	.....	c76	N80-32245
US-PATENT-APPL-SN-880272	c14	N71-27058	US-PATENT-APPL-SN-901892	c44	N78-25555
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US-PATENT-CLASS-55-208	c14	N71-18483	US-PATENT-CLASS-60-39.28R	c37	N78-24545
US-PATENT-CLASS-55-241	c35	N79-17192	US-PATENT-CLASS-60-39.28R	c37	N79-11403
US-PATENT-CLASS-55-242	c35	N79-17192	US-PATENT-CLASS-60-39.29	c20	N76-14190
US-PATENT-CLASS-55-261	c35	N76-18401	US-PATENT-CLASS-60-39.29	c35	N76-14431
US-PATENT-CLASS-55-269	c54	N77-32722	US-PATENT-CLASS-60-39.31	c07	N78-18066
US-PATENT-CLASS-55-306	c28	N70-34788	US-PATENT-CLASS-60-39.31	c07	N79-14096
US-PATENT-CLASS-55-360	c35	N79-17192	US-PATENT-CLASS-60-39.33	c44	N78-32539
US-PATENT-CLASS-55-386	c35	N75-26334	US-PATENT-CLASS-60-39.36	c28	N71-20330
US-PATENT-CLASS-55-400	c11	N71-10777	US-PATENT-CLASS-60-39.36	c28	N71-28915
US-PATENT-CLASS-55-407	c35	N79-17192	US-PATENT-CLASS-60-39.46	c27	N71-15635
US-PATENT-CLASS-55-408	c15	N70-40062	US-PATENT-CLASS-60-39.46	c15	N74-27360
US-PATENT-CLASS-55-418	c15	N71-22721	US-PATENT-CLASS-60-39.47	c27	N71-16392
US-PATENT-CLASS-55-446	c15	N72-22489	US-PATENT-CLASS-60-39.48	c28	N70-38199
US-PATENT-CLASS-55-464	c15	N72-22489	US-PATENT-CLASS-60-39.48	c28	N70-39931
US-PATENT-CLASS-55-493	c14	N72-23457	US-PATENT-CLASS-60-39.48	c27	N71-28929
US-PATENT-CLASS-55-498	c14	N72-23457	US-PATENT-CLASS-60-39.51R	c25	N78-10224
US-PATENT-CLASS-55-502	c14	N72-23457	US-PATENT-CLASS-60-39.52	c07	N78-25089
US-PATENT-CLASS-55-510	c25	N74-12813	US-PATENT-CLASS-60-39.65	c28	N71-28915
US-PATENT-CLASS-55-518	c25	N74-12813	US-PATENT-CLASS-60-39.65	c23	N73-30665
US-PATENT-CLASS-55-521	c14	N72-23457	US-PATENT-CLASS-60-39.65	c34	N78-27357
US-PATENT-CLASS-55-523	c34	N76-27515	US-PATENT-CLASS-60-39.66	c15	N70-36411
US-PATENT-CLASS-55-526	c34	N76-27515	US-PATENT-CLASS-60-39.66	c23	N73-30665
US-PATENT-CLASS-58-24	c10	N71-26326	US-PATENT-CLASS-60-39.66	c07	N77-23106
US-PATENT-CLASS-60-39.08	c37	N79-11403	US-PATENT-CLASS-60-39.66	c37	N78-10467
US-PATENT-CLASS-60-1	c15	N72-33477	US-PATENT-CLASS-60-39.66	c37	N79-11403
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US-PATENT-CLASS-60-23	c09	N71-26182	US-PATENT-CLASS-60-39.72	c23	N73-30665
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US-PATENT-CLASS-60-23	c21	N72-31637	US-PATENT-CLASS-60-39.74	c28	N72-17843
US-PATENT-CLASS-60-23	c15	N73-13467	US-PATENT-CLASS-60-39.74	c20	N79-21125
US-PATENT-CLASS-60-25	c15	N73-24513	US-PATENT-CLASS-60-39.74A	c15	N72-25455
US-PATENT-CLASS-60-25	c37	N74-21060	US-PATENT-CLASS-60-39.74R	c23	N73-30665
US-PATENT-CLASS-60-26	c21	N72-31637	US-PATENT-CLASS-60-39.74R	c20	N76-14190
US-PATENT-CLASS-60-26	c03	N73-20040	US-PATENT-CLASS-60-39.82E	c20	N78-24275
US-PATENT-CLASS-60-35.3	c28	N70-33265	US-PATENT-CLASS-60-39-48	c28	N72-11709
US-PATENT-CLASS-60-35.3	c28	N70-40367	US-PATENT-CLASS-60-51	c15	N71-27754
US-PATENT-CLASS-60-35.5	c28	N70-33356	US-PATENT-CLASS-60-53	c37	N77-22479
US-PATENT-CLASS-60-35.5	c28	N70-34175	US-PATENT-CLASS-60-54.5	c15	N71-10658
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US-PATENT-CLASS-60-35.6	c28	N70-38249	US-PATENT-CLASS-60-202	c28	N72-22770
US-PATENT-CLASS-60-35.6	c28	N70-38504	US-PATENT-CLASS-60-202	c28	N72-22771
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US-PATENT-CLASS-60-35.6	c28	N70-38710	US-PATENT-CLASS-60-202	c25	N73-25760
US-PATENT-CLASS-60-35.6	c28	N70-39899	US-PATENT-CLASS-60-202	c28	N73-27699
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US-PATENT-CLASS-60-35.54	c28	N70-34294	US-PATENT-CLASS-60-211	c28	N73-13773
US-PATENT-CLASS-60-35.54	c28	N70-38645	US-PATENT-CLASS-60-214	c15	N74-27360
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US-PATENT-CLASS-60-35.55	c28	N70-34162	US-PATENT-CLASS-60-215	c15	N74-27360

US-PATENT-CLASS-60-217	c12	N71-17631	US-PATENT-CLASS-60-574	c35	N78-10428
US-PATENT-CLASS-60-225	c28	N71-10780	US-PATENT-CLASS-60-606	c28	N80-10374
US-PATENT-CLASS-60-226A	c07	N77-17659	US-PATENT-CLASS-60-632	c20	N80-18097
US-PATENT-CLASS-60-226A	c07	N79-14096	US-PATENT-CLASS-60-641	c44	N75-32581
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US-PATENT-CLASS-60-226B	c07	N78-18066	US-PATENT-CLASS-60-645	c34	N79-20335
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US-PATENT-CLASS-60-228	c07	N77-17659	US-PATENT-CLASS-60-671	c44	N78-32542
US-PATENT-CLASS-60-230	c07	N78-27121	US-PATENT-CLASS-60-721	c71	N79-20827
US-PATENT-CLASS-60-236	c07	N81-19116	US-PATENT-CLASS-60-726	c07	N81-29129
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US-PATENT-CLASS-60-239	c07	N81-19116	US-PATENT-CLASS-60-733	c07	N80-26298
US-PATENT-CLASS-60-240	c28	N71-24736	US-PATENT-CLASS-60-737	c07	N81-29129
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US-PATENT-CLASS-60-243	c33	N71-21507	US-PATENT-CLASS-61-83	c18	N74-22136
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US-PATENT-CLASS-60-243	c28	N73-13773	US-PATENT-CLASS-62-2	c15	N71-15906
US-PATENT-CLASS-60-243	c20	N79-21124	US-PATENT-CLASS-62-3	c20	N75-24637
US-PATENT-CLASS-60-251	c28	N70-41311	US-PATENT-CLASS-62-3	c34	N78-17335
US-PATENT-CLASS-60-251	c27	N71-21819	US-PATENT-CLASS-62-4	c44	N77-32581
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US-PATENT-CLASS-60-254	c28	N73-24784	US-PATENT-CLASS-62-6	c15	N69-23190
US-PATENT-CLASS-60-256	c28	N73-24784	US-PATENT-CLASS-62-6	c23	N71-15467
US-PATENT-CLASS-60-257	c31	N70-41948	US-PATENT-CLASS-62-6	c15	N71-23025
US-PATENT-CLASS-60-258	c15	N70-22192	US-PATENT-CLASS-62-6	c23	N72-25619
US-PATENT-CLASS-60-258	c28	N71-22583	US-PATENT-CLASS-62-6	c37	N76-29590
US-PATENT-CLASS-60-258	c28	N71-28849	US-PATENT-CLASS-62-6	c44	N76-29701
US-PATENT-CLASS-60-258	c28	N72-17843	US-PATENT-CLASS-62-7	c15	N73-12486
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US-PATENT-CLASS-60-258	c20	N74-13502	US-PATENT-CLASS-62-15	c06	N70-34946
US-PATENT-CLASS-60-259	c28	N70-41275	US-PATENT-CLASS-62-18	c28	N81-14103
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US-PATENT-CLASS-60-260	c28	N70-41992	US-PATENT-CLASS-62-45	c33	N71-25351
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US-PATENT-CLASS-60-267	c33	N72-25911	US-PATENT-CLASS-62-78	c51	N79-10694
US-PATENT-CLASS-60-267	c33	N73-25952	US-PATENT-CLASS-62-80	c23	N72-25619
US-PATENT-CLASS-60-267	c28	N73-32606	US-PATENT-CLASS-62-85	c23	N72-25619
US-PATENT-CLASS-60-267	c20	N76-14191	US-PATENT-CLASS-62-89	c05	N73-26071
US-PATENT-CLASS-60-267	c34	N79-13288	US-PATENT-CLASS-62-93	c15	N69-21465
US-PATENT-CLASS-60-267	c34	N79-13289	US-PATENT-CLASS-62-93	c03	N72-28025
US-PATENT-CLASS-60-267	c34	N80-24573	US-PATENT-CLASS-62-93	c77	N75-20139
US-PATENT-CLASS-60-267	c44	N81-24519	US-PATENT-CLASS-62-100	c34	N77-19353
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US-PATENT-CLASS-60-271	c07	N78-17055	US-PATENT-CLASS-62-176	c05	N73-26071
US-PATENT-CLASS-60-271	c37	N78-17384	US-PATENT-CLASS-62-207	c05	N73-26071
US-PATENT-CLASS-60-291	c31	N73-13698	US-PATENT-CLASS-62-209	c05	N73-26071
US-PATENT-CLASS-60-300	c28	N80-10374	US-PATENT-CLASS-62-217	c31	N77-10229
US-PATENT-CLASS-60-316	c34	N76-18364	US-PATENT-CLASS-62-259	c05	N73-20137
US-PATENT-CLASS-60-508	c44	N79-18443	US-PATENT-CLASS-62-259	c05	N73-26071
US-PATENT-CLASS-60-516	c20	N75-24637	US-PATENT-CLASS-62-259	c54	N78-32721
US-PATENT-CLASS-60-517	c44	N76-29701	US-PATENT-CLASS-62-268	c14	N71-20427
US-PATENT-CLASS-60-517	c37	N81-25370	US-PATENT-CLASS-62-268	c34	N79-20336
US-PATENT-CLASS-60-518	c37	N81-14218	US-PATENT-CLASS-62-269	c34	N77-19353
US-PATENT-CLASS-60-518	c37	N81-17432	US-PATENT-CLASS-62-285	c77	N75-20139
US-PATENT-CLASS-60-520	c37	N80-31790	US-PATENT-CLASS-62-288	c77	N75-20139
US-PATENT-CLASS-60-524	c44	N81-17518	US-PATENT-CLASS-62-289	c77	N75-20139
US-PATENT-CLASS-60-525	c37	N81-25370	US-PATENT-CLASS-62-290	c77	N75-20139
US-PATENT-CLASS-60-527	c44	N74-33379	US-PATENT-CLASS-62-315	c34	N77-19353
US-PATENT-CLASS-60-527	c37	N77-12402	US-PATENT-CLASS-62-317	c77	N75-20139
US-PATENT-CLASS-60-527	c37	N77-19458	US-PATENT-CLASS-62-376	c31	N78-17237
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US-PATENT-CLASS-60-530	c20	N75-24637	US-PATENT-CLASS-62-384	c23	N71-24725
US-PATENT-CLASS-60-560	c35	N78-10428	US-PATENT-CLASS-62-467	c33	N70-37979
US-PATENT-CLASS-60-572	c44	N79-18443	US-PATENT-CLASS-62-467	c33	N71-17697

US-PATENT-CLASS-62-467	C05 N72-11084	US-PATENT-CLASS-73-12	C14 N72-16282
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US-PATENT-CLASS-62-514R	C35 N78-12390	US-PATENT-CLASS-73-12	C43 N79-25443
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US-PATENT-CLASS-62-514R	C31 N78-25256	US-PATENT-CLASS-73-12	C43 N80-23711
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US-PATENT-CLASS-62-514R	C34 N79-20336	US-PATENT-CLASS-73-15	C14 N71-22964
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US-PATENT-CLASS-65-DIG.7	C71 N78-10637	US-PATENT-CLASS-73-15.6	C14 N71-24234
US-PATENT-CLASS-65-DIG.11	C37 N74-21063	US-PATENT-CLASS-73-15.6	C14 N71-26136
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US-PATENT-CLASS-65-3	C37 N75-26371	US-PATENT-CLASS-73-15.6	C09 N74-19528
US-PATENT-CLASS-65-4B	C71 N78-10637	US-PATENT-CLASS-73-15.6	C35 N76-24523
US-PATENT-CLASS-65-7	C18 N71-23088	US-PATENT-CLASS-73-15.6	C35 N77-22450
US-PATENT-CLASS-65-21.4	C31 N81-33319	US-PATENT-CLASS-73-15.6	C39 N78-10493
US-PATENT-CLASS-65-22	C31 N81-33319	US-PATENT-CLASS-73-15R	C33 N72-25913
US-PATENT-CLASS-65-30R	C27 N78-32260	US-PATENT-CLASS-73-15R	C14 N73-28486
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US-PATENT-CLASS-65-60D	C27 N78-32260	US-PATENT-CLASS-73-17	C06 N71-24607
US-PATENT-CLASS-65-61	C74 N80-24149	US-PATENT-CLASS-73-23	C14 N71-10774
US-PATENT-CLASS-65-67	C71 N78-10637	US-PATENT-CLASS-73-23	C05 N71-11202
US-PATENT-CLASS-65-102	C71 N78-10637	US-PATENT-CLASS-73-23	C52 N74-20728
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US-PATENT-CLASS-73-355R	C14	N72-24477	US-PATENT-CLASS-73-626	C52	N79-26771
US-PATENT-CLASS-73-355R	C35	N80-18359	US-PATENT-CLASS-73-630	C39	N78-15512
US-PATENT-CLASS-73-356	C35	N75-25122	US-PATENT-CLASS-73-632	C38	N79-14398
US-PATENT-CLASS-73-361	C35	N81-26431	US-PATENT-CLASS-73-633	C52	N79-14751
US-PATENT-CLASS-73-362AR	C35	N77-27368	US-PATENT-CLASS-73-641	C38	N79-14398
US-PATENT-CLASS-73-379	C05	N73-27941	US-PATENT-CLASS-73-644	C38	N79-14398
US-PATENT-CLASS-73-379	C05	N73-30078	US-PATENT-CLASS-73-644	C52	N79-14751
US-PATENT-CLASS-73-379	C35	N75-15932	US-PATENT-CLASS-73-646	C71	N78-14867
US-PATENT-CLASS-73-382	C10	N71-13537	US-PATENT-CLASS-73-647	C32	N79-24203
US-PATENT-CLASS-73-382	C14	N71-17587	US-PATENT-CLASS-73-655	C35	N80-14371
US-PATENT-CLASS-73-384	C15	N70-37925	US-PATENT-CLASS-73-661	C35	N80-14371
US-PATENT-CLASS-73-388	C35	N74-32478	US-PATENT-CLASS-73-683.31	C35	N81-29407
US-PATENT-CLASS-73-389	C12	N71-24692	US-PATENT-CLASS-73-684.52	C35	N81-29407
US-PATENT-CLASS-73-398	C14	N70-34616	US-PATENT-CLASS-73-714	C35	N79-14347
US-PATENT-CLASS-73-398	C14	N71-21072	US-PATENT-CLASS-73-714	C34	N79-24285
US-PATENT-CLASS-73-398	C09	N71-24597	US-PATENT-CLASS-73-721	C35	N79-14347
US-PATENT-CLASS-73-398	C14	N73-30394	US-PATENT-CLASS-73-724	C32	N79-24203
US-PATENT-CLASS-73-398AR	C52	N74-27566	US-PATENT-CLASS-73-724	C52	N80-18691
US-PATENT-CLASS-73-398AR	C52	N76-29896	US-PATENT-CLASS-73-756	C35	N78-24515
US-PATENT-CLASS-73-398C	C14	N72-22438	US-PATENT-CLASS-73-756	C35	N79-14347
US-PATENT-CLASS-73-398C	C33	N76-21390	US-PATENT-CLASS-73-770	C39	N79-22537
US-PATENT-CLASS-73-399	C37	N76-18454	US-PATENT-CLASS-73-781	C52	N80-27072
US-PATENT-CLASS-73-400	C14	N71-23693	US-PATENT-CLASS-73-810	C39	N79-22537
US-PATENT-CLASS-73-400	C14	N71-24232	US-PATENT-CLASS-73-861	C34	N81-26402
US-PATENT-CLASS-73-400	C35	N79-33450	US-PATENT-CLASS-73-861.65	C02	N80-28300
US-PATENT-CLASS-73-401	C14	N70-34620	US-PATENT-CLASS-73-861.66	C02	N80-28300
US-PATENT-CLASS-73-419	C14	N71-22752	US-PATENT-CLASS-74-2	C15	N71-24600
US-PATENT-CLASS-73-420	C35	N74-13132	US-PATENT-CLASS-74-2	C31	N73-14855
US-PATENT-CLASS-73-421.5	C14	N73-12444	US-PATENT-CLASS-74-5.5	C35	N74-28097
US-PATENT-CLASS-73-421.5R	C13	N72-25323	US-PATENT-CLASS-74-5.6	C35	N74-15094
US-PATENT-CLASS-73-421.5R	C14	N73-30395	US-PATENT-CLASS-74-5.7	C35	N74-18323
US-PATENT-CLASS-73-421.5R	C52	N74-20728	US-PATENT-CLASS-74-5.7	C15	N76-14158
US-PATENT-CLASS-73-421.5R	C35	N76-18401	US-PATENT-CLASS-74-5.12	C31	N71-26537
US-PATENT-CLASS-73-421.5R	C35	N77-32456	US-PATENT-CLASS-74-5.22	C21	N73-13644
US-PATENT-CLASS-73-421R	C54	N76-14604	US-PATENT-CLASS-74-5.34	C04	N76-26175
US-PATENT-CLASS-73-422	C14	N71-20435	US-PATENT-CLASS-74-5.47	C21	N71-23289
US-PATENT-CLASS-73-422GC	C13	N72-25323	US-PATENT-CLASS-74-5F	C15	N73-12488

US-PATENT-CLASS-74-18.2	c11 N71-27036	US-PATENT-CLASS-75-171	c17 N71-16026
US-PATENT-CLASS-74-63	c15 N71-17692	US-PATENT-CLASS-75-171	c17 N73-32415
US-PATENT-CLASS-74-81	c37 N78-16369	US-PATENT-CLASS-75-172	c17 N71-23365
US-PATENT-CLASS-74-83	c37 N78-16369	US-PATENT-CLASS-75-173	c26 N75-27126
US-PATENT-CLASS-74-89	c37 N81-33483	US-PATENT-CLASS-75-173	c26 N75-27127
US-PATENT-CLASS-74-89.15	c15 N71-26635	US-PATENT-CLASS-75-178R	c04 N76-20114
US-PATENT-CLASS-74-89.15	c15 N72-21462	US-PATENT-CLASS-75-178R	c26 N80-23419
US-PATENT-CLASS-74-89.18	c15 N71-23609	US-PATENT-CLASS-75-200	c26 N74-10521
US-PATENT-CLASS-74-96	c37 N77-22482	US-PATENT-CLASS-75-200	c37 N74-13179
US-PATENT-CLASS-74-100	c15 N71-24045	US-PATENT-CLASS-75-200	c24 N75-13032
US-PATENT-CLASS-74-100R	c37 N78-31426	US-PATENT-CLASS-75-200	c37 N75-26371
US-PATENT-CLASS-74-105	c09 N72-22195	US-PATENT-CLASS-75-200	c24 N80-33482
US-PATENT-CLASS-74-126	c15 N71-21529	US-PATENT-CLASS-75-202	c17 N71-15468
US-PATENT-CLASS-74-217R	c37 N74-23070	US-PATENT-CLASS-75-203	c27 N79-14213
US-PATENT-CLASS-74-384	c37 N76-15457	US-PATENT-CLASS-75-204	c18 N71-22894
US-PATENT-CLASS-74-385	c67 N78-17056	US-PATENT-CLASS-75-205	c27 N79-14213
US-PATENT-CLASS-74-409	c15 N71-21744	US-PATENT-CLASS-75-206	c15 N72-25448
US-PATENT-CLASS-74-417	c07 N78-17056	US-PATENT-CLASS-75-206	c27 N79-14213
US-PATENT-CLASS-74-417	c37 N81-14318	US-PATENT-CLASS-75-208	c18 N72-25539
US-PATENT-CLASS-74-417	c37 N81-17432	US-PATENT-CLASS-75-208R	c37 N75-26371
US-PATENT-CLASS-74-424.8	c15 N71-26635	US-PATENT-CLASS-75-211	c18 N72-25539
US-PATENT-CLASS-74-424.8VA	c37 N75-15050	US-PATENT-CLASS-75-212	c37 N75-26371
US-PATENT-CLASS-74-425	c37 N80-32716	US-PATENT-CLASS-75-212	c27 N79-14213
US-PATENT-CLASS-74-436	c37 N75-13266	US-PATENT-CLASS-75-213	c15 N72-25448
US-PATENT-CLASS-74-468	c15 N71-24584	US-PATENT-CLASS-75-213	c37 N74-13179
US-PATENT-CLASS-74-469	c15 N72-21463	US-PATENT-CLASS-75-214	c37 N74-13179
US-PATENT-CLASS-74-469	c15 N72-28495	US-PATENT-CLASS-75-214	c37 N75-26371
US-PATENT-CLASS-74-471	c05 N70-41581	US-PATENT-CLASS-75-222	c28 N70-38197
US-PATENT-CLASS-74-471	c03 N70-42073	US-PATENT-CLASS-75-222	c37 N75-26371
US-PATENT-CLASS-74-471	c15 N71-20740	US-PATENT-CLASS-75-222	c24 N80-33482
US-PATENT-CLASS-74-471XY	c54 N75-27760	US-PATENT-CLASS-75-225	c34 N76-27515
US-PATENT-CLASS-74-480R	c05 N75-12930	US-PATENT-CLASS-75-226	c18 N72-25539
US-PATENT-CLASS-74-501R	c15 N72-22485	US-PATENT-CLASS-75-226	c26 N74-10521
US-PATENT-CLASS-74-515E	c54 N78-17676	US-PATENT-CLASS-75-226	c37 N74-13179
US-PATENT-CLASS-74-519	c03 N70-41954	US-PATENT-CLASS-75-226	c27 N79-14213
US-PATENT-CLASS-74-519	c05 N81-19087	US-PATENT-CLASS-75-229	c27 N78-17206
US-PATENT-CLASS-74-572	c07 N78-33101	US-PATENT-CLASS-75-239	c27 N78-17206
US-PATENT-CLASS-74-572	c37 N79-10422	US-PATENT-CLASS-75-241	c27 N78-17206
US-PATENT-CLASS-74-572	c44 N79-14527	US-PATENT-CLASS-77.5AQ	c27 N81-15104
US-PATENT-CLASS-74-572	c24 N81-29163	US-PATENT-CLASS-77.5CH	c27 N81-15104
US-PATENT-CLASS-74-586	c37 N79-14382	US-PATENT-CLASS-78-1	c15 N70-33330
US-PATENT-CLASS-74-594.6	c37 N74-18127	US-PATENT-CLASS-81-3R	c15 N71-29133
US-PATENT-CLASS-74-594.7	c37 N74-18127	US-PATENT-CLASS-81-9.5R	c37 N79-10419
US-PATENT-CLASS-74-661	c37 N80-32716	US-PATENT-CLASS-81-56	c37 N76-20480
US-PATENT-CLASS-74-665B	c37 N76-15457	US-PATENT-CLASS-81-57.31	c37 N76-20480
US-PATENT-CLASS-74-665C	c37 N80-32716	US-PATENT-CLASS-81-57.38	c15 N73-30457
US-PATENT-CLASS-74-674	c37 N79-20377	US-PATENT-CLASS-81-63.1	c15 N71-17805
US-PATENT-CLASS-74-675	c37 N74-27901	US-PATENT-CLASS-81-90B	c37 N79-14383
US-PATENT-CLASS-74-705	c37 N79-20377	US-PATENT-CLASS-81-119	c37 N79-14383
US-PATENT-CLASS-74-710	c37 N74-27901	US-PATENT-CLASS-81-180B	c37 N79-14383
US-PATENT-CLASS-74-764	c37 N79-20377	US-PATENT-CLASS-82-1.2	c37 N81-14319
US-PATENT-CLASS-74-800	c37 N78-17385	US-PATENT-CLASS-82-1C	c37 N81-14319
US-PATENT-CLASS-74-820	c37 N75-13266	US-PATENT-CLASS-82-14	c15 N71-22722
US-PATENT-CLASS-75-.5E	c17 N72-22530	US-PATENT-CLASS-82-24R	c14 N72-16283
US-PATENT-CLASS-75-DIG.1	c18 N72-25539	US-PATENT-CLASS-82-36R	c37 N81-14319
US-PATENT-CLASS-75-DIG.1	c37 N75-26371	US-PATENT-CLASS-83-8	c15 N72-27485
US-PATENT-CLASS-75-0.5BB	c15 N72-25448	US-PATENT-CLASS-83-152	c76 N80-18951
US-PATENT-CLASS-75-20F	c15 N72-11387	US-PATENT-CLASS-83-451	c37 N77-14478
US-PATENT-CLASS-75-25	c28 N81-15119	US-PATENT-CLASS-83-452	c39 N74-13131
US-PATENT-CLASS-75-63	c15 N71-27184	US-PATENT-CLASS-83-467	c15 N71-22798
US-PATENT-CLASS-75-65R	c24 N77-27187	US-PATENT-CLASS-83-467R	c37 N77-14478
US-PATENT-CLASS-75-66	c17 N71-26773	US-PATENT-CLASS-83-522	c15 N72-27485
US-PATENT-CLASS-75-66	c06 N73-13129	US-PATENT-CLASS-83-562	c15 N72-27485
US-PATENT-CLASS-75-66	c17 N73-28573	US-PATENT-CLASS-83-563	c15 N72-27485
US-PATENT-CLASS-75-122.7	c37 N77-19458	US-PATENT-CLASS-83-588	c15 N72-27485
US-PATENT-CLASS-75-124	c26 N78-18182	US-PATENT-CLASS-83-602	c39 N74-13131
US-PATENT-CLASS-75-124	c26 N80-32484	US-PATENT-CLASS-83-820	c37 N80-29703
US-PATENT-CLASS-75-126D	c26 N78-18182	US-PATENT-CLASS-83-870	c76 N80-18951
US-PATENT-CLASS-75-126F	c26 N78-18182	US-PATENT-CLASS-83-917	c39 N74-13131
US-PATENT-CLASS-75-128G	c26 N78-18182	US-PATENT-CLASS-85-1	c15 N72-22488
US-PATENT-CLASS-75-128T	c26 N78-18182	US-PATENT-CLASS-85-3	c15 N71-17653
US-PATENT-CLASS-75-134D	c76 N79-16678	US-PATENT-CLASS-85-5B	c15 N72-11385
US-PATENT-CLASS-75-135	c18 N73-32437	US-PATENT-CLASS-85-7	c15 N71-23254
US-PATENT-CLASS-75-135	c24 N77-27187	US-PATENT-CLASS-85-33	c15 N71-15922
US-PATENT-CLASS-75-135	c26 N80-23419	US-PATENT-CLASS-85-33	c15 N71-21489
US-PATENT-CLASS-75-138	c26 N80-23419	US-PATENT-CLASS-86-1	c28 N71-26779
US-PATENT-CLASS-75-139	c24 N77-27187	US-PATENT-CLASS-86-1R	c28 N77-10213
US-PATENT-CLASS-75-142	c17 N71-20743	US-PATENT-CLASS-86-1R	c20 N77-17143
US-PATENT-CLASS-75-170	c17 N71-15644	US-PATENT-CLASS-86-20.2	c28 N71-26779
US-PATENT-CLASS-75-170	c17 N71-16025	US-PATENT-CLASS-86-20R	c20 N77-17143
US-PATENT-CLASS-75-170	c17 N71-23248	US-PATENT-CLASS-88-1	c21 N70-35427
US-PATENT-CLASS-75-170	c17 N72-22535	US-PATENT-CLASS-88-1	c21 N71-22880
US-PATENT-CLASS-75-170	c37 N77-19458	US-PATENT-CLASS-88-14	c14 N70-34298
US-PATENT-CLASS-75-170	c26 N77-20201	US-PATENT-CLASS-88-14	c14 N70-40003
US-PATENT-CLASS-75-170	c26 N77-32279	US-PATENT-CLASS-88-14	c14 N70-41946
US-PATENT-CLASS-75-170	c26 N77-32280	US-PATENT-CLASS-88-14	c14 N70-41955
US-PATENT-CLASS-75-170	c26 N78-18183	US-PATENT-CLASS-88-14	c09 N71-22999
US-PATENT-CLASS-75-171	c17 N70-33283	US-PATENT-CLASS-88-16	c14 N70-33254
US-PATENT-CLASS-75-171	c17 N70-36616	US-PATENT-CLASS-88-24	c23 N71-21882

US-PATENT-CLASS-89-1	C03	N70-34667	US-PATENT-CLASS-102-49.7	C20	N78-24275
US-PATENT-CLASS-89-1	C15	N71-16078	US-PATENT-CLASS-102-49.8	C28	N73-24784
US-PATENT-CLASS-89-1.5	C31	N71-15675	US-PATENT-CLASS-102-50	C31	N71-24750
US-PATENT-CLASS-89-1.5	C15	N71-24600	US-PATENT-CLASS-102-56B	C02	N81-14968
US-PATENT-CLASS-89-1.7	C11	N70-38202	US-PATENT-CLASS-102-70.2	C09	N71-18599
US-PATENT-CLASS-89-1.7	C30	N70-40353	US-PATENT-CLASS-102-70.2A	C28	N74-27425
US-PATENT-CLASS-89-1.7	C03	N71-12258	US-PATENT-CLASS-102-70.2R	C19	N74-15089
US-PATENT-CLASS-89-1.7	C03	N71-12259	US-PATENT-CLASS-102-70.2B	C28	N74-27425
US-PATENT-CLASS-89-1.801	C20	N76-22296	US-PATENT-CLASS-102-70R	C20	N78-24275
US-PATENT-CLASS-89-1.806	C15	N71-24043	US-PATENT-CLASS-102-90	C15	N74-27360
US-PATENT-CLASS-89-1.811	C15	N72-17455	US-PATENT-CLASS-102-92.1	C02	N81-14968
US-PATENT-CLASS-89-8	C11	N71-18578	US-PATENT-CLASS-102-95	C11	N73-32152
US-PATENT-CLASS-89-8	C11	N73-32152	US-PATENT-CLASS-102-99	C28	N77-10213
US-PATENT-CLASS-89-8	C75	N76-14531	US-PATENT-CLASS-102-101	C28	N71-26779
US-PATENT-CLASS-89-8	C75	N76-17951	US-PATENT-CLASS-102-103	C20	N78-32179
US-PATENT-CLASS-89-8	C09	N79-21084	US-PATENT-CLASS-102-105	C33	N72-17947
US-PATENT-CLASS-90-11	C15	N71-33518	US-PATENT-CLASS-102-105	C33	N72-25911
US-PATENT-CLASS-90-12	C15	N71-22799	US-PATENT-CLASS-102-105	C33	N73-25952
US-PATENT-CLASS-90-12.5	C37	N74-25968	US-PATENT-CLASS-102-105	C27	N74-27037
US-PATENT-CLASS-91-186	C05	N73-32014	US-PATENT-CLASS-102-105	C24	N79-25142
US-PATENT-CLASS-91-325	C37	N81-32510	US-PATENT-CLASS-103.5R	C04	N73-27052
US-PATENT-CLASS-91-341R	C37	N81-32510	US-PATENT-CLASS-103-1	C26	N71-21824
US-PATENT-CLASS-91-361	C15	N71-27754	US-PATENT-CLASS-103-37	C28	N71-14058
US-PATENT-CLASS-91-363A	C15	N73-13466	US-PATENT-CLASS-103-48	C15	N71-24042
US-PATENT-CLASS-91-390	C15	N71-27147	US-PATENT-CLASS-104-1	C05	N71-28619
US-PATENT-CLASS-91-390	C15	N71-27754	US-PATENT-CLASS-104-23FS	C85	N74-34672
US-PATENT-CLASS-91-410	C37	N81-32510	US-PATENT-CLASS-104-138R	C85	N74-34672
US-PATENT-CLASS-91-448	C15	N71-27754	US-PATENT-CLASS-104-139	C05	N71-28619
US-PATENT-CLASS-91-448	C15	N73-13466	US-PATENT-CLASS-105-161	C43	N79-26439
US-PATENT-CLASS-91-461	C15	N71-27147	US-PATENT-CLASS-106-1	C44	N79-31752
US-PATENT-CLASS-92-49	C14	N73-13418	US-PATENT-CLASS-106-1.2	C44	N79-31752
US-PATENT-CLASS-92-94	C32	N70-41370	US-PATENT-CLASS-106-13	C23	N75-14834
US-PATENT-CLASS-92-130R	C37	N81-33483	US-PATENT-CLASS-106-15	C18	N71-14014
US-PATENT-CLASS-93-1	C15	N70-33180	US-PATENT-CLASS-106-15B	C18	N71-15469
US-PATENT-CLASS-94.9N	C27	N81-15104	US-PATENT-CLASS-106-15FP	C27	N74-27037
US-PATENT-CLASS-95-1.1	C14	N72-18411	US-PATENT-CLASS-106-15FP	C27	N76-24405
US-PATENT-CLASS-95-1.1	C14	N73-26431	US-PATENT-CLASS-106-15FP	C24	N78-15180
US-PATENT-CLASS-95-11	C14	N71-18465	US-PATENT-CLASS-106-15B	C23	N75-14834
US-PATENT-CLASS-95-11	C16	N71-33410	US-PATENT-CLASS-106-39	C26	N72-28762
US-PATENT-CLASS-95-11	C14	N73-32319	US-PATENT-CLASS-106-39.5	C27	N78-19302
US-PATENT-CLASS-95-11.5	C14	N73-32319	US-PATENT-CLASS-106-39R	C18	N73-14584
US-PATENT-CLASS-95-11.5R	C14	N73-19419	US-PATENT-CLASS-106-40	C18	N71-22998
US-PATENT-CLASS-95-11R	C14	N73-19419	US-PATENT-CLASS-106-43	C27	N78-17206
US-PATENT-CLASS-95-12	C14	N73-33361	US-PATENT-CLASS-106-43	C37	N81-25371
US-PATENT-CLASS-95-12.5	C31	N72-25842	US-PATENT-CLASS-106-46	C26	N72-28762
US-PATENT-CLASS-95-12.5	C14	N73-14427	US-PATENT-CLASS-106-48	C27	N75-27160
US-PATENT-CLASS-95-18	C14	N72-20380	US-PATENT-CLASS-106-48	C27	N78-32260
US-PATENT-CLASS-95-42	C14	N73-32322	US-PATENT-CLASS-106-52	C37	N74-21063
US-PATENT-CLASS-95-44	C14	N71-26474	US-PATENT-CLASS-106-54	C27	N75-27160
US-PATENT-CLASS-95-53	C15	N71-21060	US-PATENT-CLASS-106-54	C27	N76-22377
US-PATENT-CLASS-95-53EA	C33	N74-20861	US-PATENT-CLASS-106-54	C27	N76-23426
US-PATENT-CLASS-95-58	C14	N70-40273	US-PATENT-CLASS-106-54	C27	N78-32260
US-PATENT-CLASS-95-59	C14	N73-14427	US-PATENT-CLASS-106-55	C18	N73-14584
US-PATENT-CLASS-95-89R	C35	N74-15831	US-PATENT-CLASS-106-58	C18	N73-14584
US-PATENT-CLASS-96-27R	C35	N79-10389	US-PATENT-CLASS-106-63	C27	N78-19302
US-PATENT-CLASS-96-36.2	C06	N72-21094	US-PATENT-CLASS-106-65	C27	N78-19302
US-PATENT-CLASS-96-36.2	C15	N72-25452	US-PATENT-CLASS-106-73.5	C18	N69-39979
US-PATENT-CLASS-96-38.3	C35	N74-26946	US-PATENT-CLASS-106-74	C24	N79-31347
US-PATENT-CLASS-96-49	C14	N71-17574	US-PATENT-CLASS-106-74	C18	N71-24183
US-PATENT-CLASS-96-60R	C35	N79-10389	US-PATENT-CLASS-106-84	C18	N71-24184
US-PATENT-CLASS-96-79	C35	N74-26946	US-PATENT-CLASS-106-84	C18	N72-22566
US-PATENT-CLASS-96-87A	C27	N78-14164	US-PATENT-CLASS-106-84	C18	N72-23581
US-PATENT-CLASS-96-90PC	C14	N72-22443	US-PATENT-CLASS-106-84	C24	N79-14156
US-PATENT-CLASS-98-1	C54	N78-17679	US-PATENT-CLASS-106-84	C24	N79-31347
US-PATENT-CLASS-98-1.5	C44	N78-32539	US-PATENT-CLASS-106-84	C18	N71-16124
US-PATENT-CLASS-98-39	C31	N74-27902	US-PATENT-CLASS-106-88	C05	N72-25120
US-PATENT-CLASS-99-80FS	C05	N72-33096	US-PATENT-CLASS-106-209	C18	N72-22566
US-PATENT-CLASS-100-8	C33	N74-17928	US-PATENT-CLASS-106-286	C23	N75-14834
US-PATENT-CLASS-100-259	C15	N72-20446	US-PATENT-CLASS-106-287SB	C18	N72-22566
US-PATENT-CLASS-102-21.6	C46	N79-22679	US-PATENT-CLASS-106-288B	C18	N72-17532
US-PATENT-CLASS-102-28EB	C28	N74-27425	US-PATENT-CLASS-106-292	C27	N77-30237
US-PATENT-CLASS-102-28R	C28	N79-11231	US-PATENT-CLASS-106-292	C18	N71-26772
US-PATENT-CLASS-102-34.4	C07	N72-25171	US-PATENT-CLASS-106-296	C27	N77-30237
US-PATENT-CLASS-102-39	C20	N78-24275	US-PATENT-CLASS-106-296	C24	N79-14156
US-PATENT-CLASS-102-49	C33	N70-36846	US-PATENT-CLASS-106-296	C18	N72-17532
US-PATENT-CLASS-102-49	C28	N70-38181	US-PATENT-CLASS-106-299	C27	N77-30237
US-PATENT-CLASS-102-49	C03	N70-39930	US-PATENT-CLASS-106-299	C24	N76-24363
US-PATENT-CLASS-102-49	C15	N70-41679	US-PATENT-CLASS-106-306	C09	N75-12968
US-PATENT-CLASS-102-49	C28	N70-41967	US-PATENT-CLASS-108-136	C31	N81-19343
US-PATENT-CLASS-102-49	C31	N71-10582	US-PATENT-CLASS-109-49.5	C31	N81-19343
US-PATENT-CLASS-102-49	C15	N71-13789	US-PATENT-CLASS-109-58.5	C31	N81-15154
US-PATENT-CLASS-102-49	C31	N71-15692	US-PATENT-CLASS-110-218	C31	N81-15154
US-PATENT-CLASS-102-49	C31	N71-17730	US-PATENT-CLASS-110-229	C31	N81-15154
US-PATENT-CLASS-102-49.3	C20	N77-17143	US-PATENT-CLASS-110-232	C31	N81-15154
US-PATENT-CLASS-102-49.5	C31	N71-15687	US-PATENT-CLASS-110-343	C31	N81-15154
US-PATENT-CLASS-102-49.5	C15	N71-22874	US-PATENT-CLASS-110-347	C31	N81-15154
US-PATENT-CLASS-102-49.5	C31	N71-23008	US-PATENT-CLASS-112-402	C18	N71-26285
US-PATENT-CLASS-102-49.5	C31	N73-14853	US-PATENT-CLASS-113-116	C15	N71-15597
US-PATENT-CLASS-102-49.7	C28	N73-24784	US-PATENT-CLASS-114-16.6	C37	N76-22540

US-PATENT-CLASS-114-66.5	c12 N70-33305	US-PATENT-CLASS-117-237	c76 N79-16678
US-PATENT-CLASS-114-122	c02 N73-26006	US-PATENT-CLASS-117-239	c76 N79-16678
US-PATENT-CLASS-115-103.5	c51 N75-13502	US-PATENT-CLASS-117-240	c76 N79-16678
US-PATENT-CLASS-116-114.5	c35 N75-25122	US-PATENT-CLASS-118-6	c51 N77-27677
US-PATENT-CLASS-116-114AB	c14 N72-25411	US-PATENT-CLASS-118-7	c51 N77-27677
US-PATENT-CLASS-116-114AB	c35 N75-33367	US-PATENT-CLASS-118-9	c51 N77-27677
US-PATENT-CLASS-116-117	c14 N70-42074	US-PATENT-CLASS-118-11	c15 N71-17647
US-PATENT-CLASS-117-2B	c32 N74-27612	US-PATENT-CLASS-118-43	c25 N75-29192
US-PATENT-CLASS-117-6	c14 N71-20461	US-PATENT-CLASS-118-48	c25 N75-26043
US-PATENT-CLASS-117-6	c27 N81-15104	US-PATENT-CLASS-118-49	c25 N79-28253
US-PATENT-CLASS-117-8.5	c24 N75-33181	US-PATENT-CLASS-118-49.1	c15 N72-32487
US-PATENT-CLASS-117-16B	c15 N72-25452	US-PATENT-CLASS-118-49.1	c31 N75-12161
US-PATENT-CLASS-117-21	c18 N69-39895	US-PATENT-CLASS-118-49.5	c25 N75-26043
US-PATENT-CLASS-117-33.3	c70 N74-13436	US-PATENT-CLASS-118-50	c09 N71-26701
US-PATENT-CLASS-117-35	c32 N79-19186	US-PATENT-CLASS-118-50	c37 N78-17383
US-PATENT-CLASS-117-35B	c06 N73-13128	US-PATENT-CLASS-118-52	c37 N81-33482
US-PATENT-CLASS-117-37	c15 N72-25452	US-PATENT-CLASS-118-308	c37 N81-33482
US-PATENT-CLASS-117-38	c24 N75-33181	US-PATENT-CLASS-118-313	c17 N71-24911
US-PATENT-CLASS-117-43	c31 N79-21227	US-PATENT-CLASS-118-500	c51 N77-27677
US-PATENT-CLASS-117-45	c74 N74-20008	US-PATENT-CLASS-119-15	c37 N78-17383
US-PATENT-CLASS-117-46	c15 N71-16077	US-PATENT-CLASS-119-17	c11 N71-22875
US-PATENT-CLASS-117-46FS	c24 N75-33181	US-PATENT-CLASS-119-18	c51 N81-32829
US-PATENT-CLASS-117-47B	c15 N72-25452	US-PATENT-CLASS-119-29	c51 N81-32829
US-PATENT-CLASS-117-50	c15 N71-15610	US-PATENT-CLASS-119-51.5	c51 N78-27733
US-PATENT-CLASS-117-62	c15 N72-25447	US-PATENT-CLASS-119-51.11	c51 N74-15778
US-PATENT-CLASS-117-62	c15 N72-25452	US-PATENT-CLASS-119-51.13	c35 N78-19466
US-PATENT-CLASS-117-65.2	c18 N71-10772	US-PATENT-CLASS-119-51B	c51 N74-15778
US-PATENT-CLASS-117-66	c15 N73-32360	US-PATENT-CLASS-119-52AF	c51 N74-15778
US-PATENT-CLASS-117-69	c18 N70-36400	US-PATENT-CLASS-119-54	c51 N74-15778
US-PATENT-CLASS-117-69	c15 N71-16075	US-PATENT-CLASS-119-72.5	c35 N78-19466
US-PATENT-CLASS-117-72	c35 N75-25122	US-PATENT-CLASS-119-96	c05 N71-28619
US-PATENT-CLASS-117-93.1GD	c25 N75-12087	US-PATENT-CLASS-121-38	c15 N70-35409
US-PATENT-CLASS-117-93.3	c15 N72-25452	US-PATENT-CLASS-121-38	c02 N71-29128
US-PATENT-CLASS-117-93.3	c37 N75-15992	US-PATENT-CLASS-122-32	c33 N72-20915
US-PATENT-CLASS-117-93.16D	c15 N72-25447	US-PATENT-CLASS-123-DIG.8	c37 N77-31497
US-PATENT-CLASS-117-95	c24 N74-19769	US-PATENT-CLASS-123-DIG.12	c37 N76-18457
US-PATENT-CLASS-117-95	c36 N75-15029	US-PATENT-CLASS-123-DIG.12	c44 N78-33526
US-PATENT-CLASS-117-97	c36 N75-15029	US-PATENT-CLASS-123-DIG.12	c28 N80-10374
US-PATENT-CLASS-117-104	c18 N71-26100	US-PATENT-CLASS-123-1A	c44 N76-29700
US-PATENT-CLASS-117-105	c15 N73-32360	US-PATENT-CLASS-123-1A	c44 N78-33526
US-PATENT-CLASS-117-105.2	c37 N74-11301	US-PATENT-CLASS-123-3	c44 N76-18642
US-PATENT-CLASS-117-105.2	c24 N75-33181	US-PATENT-CLASS-123-3	c44 N76-29700
US-PATENT-CLASS-117-105.5	c15 N73-32360	US-PATENT-CLASS-123-3	c44 N77-10636
US-PATENT-CLASS-117-106	c33 N71-14032	US-PATENT-CLASS-123-3	c37 N77-31497
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US-PATENT-CLASS-117-106A	c37 N75-15992	US-PATENT-CLASS-123-3	c28 N80-10374
US-PATENT-CLASS-117-106A	c25 N75-26043	US-PATENT-CLASS-123-37	c37 N77-31497
US-PATENT-CLASS-117-107	c15 N72-25447	US-PATENT-CLASS-123-41.33	c07 N77-23106
US-PATENT-CLASS-117-107	c76 N79-16678	US-PATENT-CLASS-123-41.33	c37 N78-10467
US-PATENT-CLASS-117-107.2	c25 N75-26043	US-PATENT-CLASS-123-59B	c37 N77-31497
US-PATENT-CLASS-117-119	c18 N71-16105	US-PATENT-CLASS-123-89A	c37 N76-18457
US-PATENT-CLASS-117-119	c76 N79-16678	US-PATENT-CLASS-123-102	c11 N72-20244
US-PATENT-CLASS-117-124C	c15 N72-25452	US-PATENT-CLASS-123-119A	c37 N77-31497
US-PATENT-CLASS-117-124F	c23 N75-14834	US-PATENT-CLASS-123-119B	c37 N76-18457
US-PATENT-CLASS-117-126GB	c37 N75-26371	US-PATENT-CLASS-123-120	c37 N76-18457
US-PATENT-CLASS-117-126GB	c27 N74-23125	US-PATENT-CLASS-123-121	c37 N76-18457
US-PATENT-CLASS-117-126B	c37 N75-26371	US-PATENT-CLASS-123-122AB	c28 N72-22772
US-PATENT-CLASS-117-129	c37 N74-21063	US-PATENT-CLASS-123-122AB	c37 N77-31497
US-PATENT-CLASS-117-129	c27 N75-27160	US-PATENT-CLASS-123-122E	c07 N77-23106
US-PATENT-CLASS-117-130B	c15 N73-32360	US-PATENT-CLASS-123-122E	c37 N78-10467
US-PATENT-CLASS-117-132	c06 N72-25150	US-PATENT-CLASS-123-148CB	c33 N77-28385
US-PATENT-CLASS-117-132B	c27 N74-23125	US-PATENT-CLASS-123-148DC	c37 N79-11405
US-PATENT-CLASS-117-135.5	c23 N75-14834	US-PATENT-CLASS-123-148E	c33 N77-28385
US-PATENT-CLASS-117-138.8B	c15 N73-32360	US-PATENT-CLASS-123-148E	c37 N79-11405
US-PATENT-CLASS-117-151	c15 N73-32360	US-PATENT-CLASS-123-179R	c28 N80-10374
US-PATENT-CLASS-117-152	c15 N72-25452	US-PATENT-CLASS-124-1	c75 N76-17951
US-PATENT-CLASS-117-160R	c15 N73-32360	US-PATENT-CLASS-124-6	c09 N77-19076
US-PATENT-CLASS-117-161	c06 N72-25150	US-PATENT-CLASS-124-11B	c75 N76-17951
US-PATENT-CLASS-117-161P	c06 N73-27580	US-PATENT-CLASS-125-1	c46 N74-23069
US-PATENT-CLASS-117-161UA	c25 N75-12087	US-PATENT-CLASS-125-3	c46 N74-23069
US-PATENT-CLASS-117-161UN	c06 N73-27980	US-PATENT-CLASS-125-21	c37 N80-29703
US-PATENT-CLASS-117-161UN	c27 N74-23125	US-PATENT-CLASS-125-23B	c76 N80-18951
US-PATENT-CLASS-117-161UN	c25 N75-12087	US-PATENT-CLASS-126-91A	c25 N79-11151
US-PATENT-CLASS-117-161UZ	c25 N75-12087	US-PATENT-CLASS-126-263	c44 N77-32581
US-PATENT-CLASS-117-200	c09 N72-25259	US-PATENT-CLASS-126-263	c44 N78-17460
US-PATENT-CLASS-117-201	c15 N69-21460	US-PATENT-CLASS-126-263	c44 N80-20808
US-PATENT-CLASS-117-201	c18 N71-16046	US-PATENT-CLASS-126-270	c09 N70-40234
US-PATENT-CLASS-117-201	c03 N72-24037	US-PATENT-CLASS-126-270	c03 N70-41580
US-PATENT-CLASS-117-201	c25 N75-26043	US-PATENT-CLASS-126-270	c34 N74-23039
US-PATENT-CLASS-117-211	c15 N72-25447	US-PATENT-CLASS-126-270	c44 N76-14595
US-PATENT-CLASS-117-212	c09 N71-20705	US-PATENT-CLASS-126-270	c44 N76-23675
US-PATENT-CLASS-117-212	c15 N71-29032	US-PATENT-CLASS-126-270	c44 N76-24696
US-PATENT-CLASS-117-212	c26 N72-28762	US-PATENT-CLASS-126-270	c35 N77-20401
US-PATENT-CLASS-117-217	c15 N72-25447	US-PATENT-CLASS-126-270	c44 N77-32582
US-PATENT-CLASS-117-217	c26 N72-28762	US-PATENT-CLASS-126-270	c44 N78-15560
US-PATENT-CLASS-117-224	c15 N71-28582	US-PATENT-CLASS-126-270	c44 N78-19599
US-PATENT-CLASS-117-228	c06 N73-27980	US-PATENT-CLASS-126-270	c44 N78-31526
US-PATENT-CLASS-117-234	c76 N79-16678	US-PATENT-CLASS-126-270	c44 N79-11471
US-PATENT-CLASS-117-235	c76 N79-16678		

US-PATENT-CLASS-126-270	.....	c44	N79-14526	US-PATENT-CLASS-128-2.06B	.....	c05	N75-24716
US-PATENT-CLASS-126-270	.....	c44	N79-23481	US-PATENT-CLASS-128-2.06E	.....	c52	N76-29896
US-PATENT-CLASS-126-270	.....	c44	N79-24432	US-PATENT-CLASS-128-2.06F	.....	c52	N74-12778
US-PATENT-CLASS-126-271	.....	c44	N75-32581	US-PATENT-CLASS-128-2.06G	.....	c05	N73-27941
US-PATENT-CLASS-126-271	.....	c44	N76-14602	US-PATENT-CLASS-128-2.06H	.....	c52	N76-14757
US-PATENT-CLASS-126-271	c44	N76-22657	US-PATENT-CLASS-128-2.07	c05	N73-32015
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US-PATENT-CLASS-126-271	c44	N78-31525	US-PATENT-CLASS-128-2H	c52	N76-14757
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US-PATENT-CLASS-126-271	c44	N79-23481	US-PATENT-CLASS-128-2P	c52	N76-29894
US-PATENT-CLASS-126-271	c44	N79-24433	US-PATENT-CLASS-128-2R	c09	N72-22202
US-PATENT-CLASS-126-400	.....	c44	N78-15560	US-PATENT-CLASS-128-2R	.....	c52	N79-12694
US-PATENT-CLASS-126-400	.....	c44	N79-24433	US-PATENT-CLASS-128-2S	.....	c52	N74-10975
US-PATENT-CLASS-126-417	.....	c44	N80-16452	US-PATENT-CLASS-128-2S	.....	c52	N74-27864
US-PATENT-CLASS-126-419	.....	c44	N80-20810	US-PATENT-CLASS-128-2S	.....	c33	N75-31329
US-PATENT-CLASS-126-419	.....	c44	N81-17518	US-PATENT-CLASS-128-2S	.....	c33	N76-19338
US-PATENT-CLASS-126-434	.....	c44	N80-20810	US-PATENT-CLASS-128-2S	.....	c52	N76-29895
US-PATENT-CLASS-126-437	.....	c44	N80-20810	US-PATENT-CLASS-128-2S	.....	c52	N76-29896
US-PATENT-CLASS-126-438	.....	c44	N80-14473	US-PATENT-CLASS-128-2V	.....	c52	N74-20726
US-PATENT-CLASS-126-442	.....	c44	N80-14473	US-PATENT-CLASS-128-2V	.....	c35	N75-12271
US-PATENT-CLASS-126-901	.....	c44	N80-16452	US-PATENT-CLASS-128-2V	.....	c54	N75-27760
US-PATENT-CLASS-128-2.06E	.....	c05	N75-24716	US-PATENT-CLASS-128-2V	.....	c52	N79-14751
US-PATENT-CLASS-128-2.07	.....	c52	N79-21750	US-PATENT-CLASS-128-2V	.....	c52	N79-18580
US-PATENT-CLASS-128-DIG.4	.....	c05	N72-27103	US-PATENT-CLASS-128-6	.....	c52	N80-16725
US-PATENT-CLASS-128-DIG.4	.....	c05	N75-24716	US-PATENT-CLASS-128-24	.....	c05	N71-24738
US-PATENT-CLASS-128-DIG.4	.....	c35	N76-24525	US-PATENT-CLASS-128-24A	.....	c05	N73-27062
US-PATENT-CLASS-128-DIG.4	.....	c52	N77-28717	US-PATENT-CLASS-128-24A	.....	c54	N75-27760
US-PATENT-CLASS-128-DIG.6	.....	c51	N81-14605	US-PATENT-CLASS-128-25	.....	c05	N71-24738
US-PATENT-CLASS-128-DIG.9	.....	c52	N80-16725	US-PATENT-CLASS-128-25R	.....	c37	N74-18127
US-PATENT-CLASS-128-DIG.9	.....	c51	N81-14605	US-PATENT-CLASS-128-26	.....	c52	N76-19785
US-PATENT-CLASS-128-DIG.12	.....	c37	N77-28487	US-PATENT-CLASS-128-29	.....	c05	N70-39922
US-PATENT-CLASS-128-DIG.12	.....	c51	N81-14605	US-PATENT-CLASS-128-80F	.....	c52	N81-25661
US-PATENT-CLASS-128-DIG.16	.....	c51	N81-14605	US-PATENT-CLASS-128-89R	.....	c52	N81-25662
US-PATENT-CLASS-128-DIG.20	.....	c52	N76-19785	US-PATENT-CLASS-128-92C	.....	c27	N78-17215
US-PATENT-CLASS-128-DIG.20	.....	c37	N81-17433	US-PATENT-CLASS-128-92G	.....	c27	N78-17215
US-PATENT-CLASS-128-DIG.25	.....	c52	N81-25660	US-PATENT-CLASS-128-142.2	.....	c54	N76-24900
US-PATENT-CLASS-128-DIG.26	.....	c51	N81-14605	US-PATENT-CLASS-128-142.5	.....	c05	N71-11190
US-PATENT-CLASS-128-1	.....	c05	N70-41619	US-PATENT-CLASS-128-142.5	.....	c05	N71-11203
US-PATENT-CLASS-128-1	.....	c05	N71-20268	US-PATENT-CLASS-128-142.5	.....	c05	N71-17599
US-PATENT-CLASS-128-1A	.....	c05	N73-32012	US-PATENT-CLASS-128-142.5	.....	c05	N72-20096
US-PATENT-CLASS-128-1B	.....	c52	N77-25772	US-PATENT-CLASS-128-142.5	.....	c05	N73-25125
US-PATENT-CLASS-128-1B	.....	c52	N77-28716	US-PATENT-CLASS-128-142.7	.....	c54	N78-32721
US-PATENT-CLASS-128-1B	.....	c52	N81-25660	US-PATENT-CLASS-128-142R	.....	c54	N80-10799
US-PATENT-CLASS-128-2	.....	c05	N73-27062	US-PATENT-CLASS-128-145.8	.....	c54	N75-27761
US-PATENT-CLASS-128-2.1	c05	N71-11193	US-PATENT-CLASS-128-191R	c25	N74-12813
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US-PATENT-CLASS-128-2.1	c05	N71-24729	US-PATENT-CLASS-128-203	c54	N76-24900
US-PATENT-CLASS-128-2.1	c09	N71-26002	US-PATENT-CLASS-128-204.18	c51	N81-14605
US-PATENT-CLASS-128-2.1	.....	c05	N72-25120	US-PATENT-CLASS-128-206F	.....	c14	N73-24473
US-PATENT-CLASS-128-2.1A	.....	c09	N72-17153	US-PATENT-CLASS-128-207.14	.....	c51	N81-14605
US-PATENT-CLASS-128-2.1A	.....	c09	N72-22202	US-PATENT-CLASS-128-207.28	.....	c51	N81-14605
US-PATENT-CLASS-128-2.1A	.....	c52	N74-26625	US-PATENT-CLASS-128-212	.....	c54	N80-10799
US-PATENT-CLASS-128-2.1A	.....	c52	N76-14757	US-PATENT-CLASS-128-214D	.....	c52	N79-14749
US-PATENT-CLASS-128-2.1A	.....	c52	N76-29894	US-PATENT-CLASS-128-214E	.....	c52	N74-22771
US-PATENT-CLASS-128-2.1A	.....	c52	N79-18580	US-PATENT-CLASS-128-214F	.....	c37	N77-28487
US-PATENT-CLASS-128-2.1E	.....	c05	N72-27103	US-PATENT-CLASS-128-230	.....	c52	N75-33640
US-PATENT-CLASS-128-2.1E	.....	c35	N76-24525	US-PATENT-CLASS-128-236	.....	c51	N81-14605
US-PATENT-CLASS-128-2.1E	.....	c52	N77-28717	US-PATENT-CLASS-128-272	.....	c15	N71-24835
US-PATENT-CLASS-128-2.1E	.....	c05	N73-26072	US-PATENT-CLASS-128-272	.....	c52	N79-14749
US-PATENT-CLASS-128-2.1E	.....	c35	N76-24525	US-PATENT-CLASS-128-275	.....	c15	N71-24835
US-PATENT-CLASS-128-2.1E	.....	c05	N70-41329	US-PATENT-CLASS-128-275	.....	c52	N81-29763
US-PATENT-CLASS-128-2.05	.....	c04	N71-23185	US-PATENT-CLASS-128-276	.....	c52	N80-14684
US-PATENT-CLASS-128-2.05	.....	c05	N71-27234	US-PATENT-CLASS-128-276	.....	c52	N80-18690
US-PATENT-CLASS-128-2.05A	.....	c52	N74-26626	US-PATENT-CLASS-128-283	.....	c05	N69-23192
US-PATENT-CLASS-128-2.05A	.....	c54	N75-13531	US-PATENT-CLASS-128-295	.....	c05	N72-22093
US-PATENT-CLASS-128-2.05E	.....	c52	N74-27566	US-PATENT-CLASS-128-295	.....	c52	N81-24711
US-PATENT-CLASS-128-2.05E	.....	c52	N76-29896	US-PATENT-CLASS-128-295	.....	c52	N81-28740
US-PATENT-CLASS-128-2.05F	.....	c14	N73-32326	US-PATENT-CLASS-128-303R	.....	c52	N77-28716
US-PATENT-CLASS-128-2.05F	.....	c54	N75-13531	US-PATENT-CLASS-128-305	.....	c05	N73-27062
US-PATENT-CLASS-128-2.05R	.....	c05	N73-27941	US-PATENT-CLASS-128-305	.....	c52	N75-33640
US-PATENT-CLASS-128-2.05R	.....	c52	N76-29895	US-PATENT-CLASS-128-305	.....	c52	N78-14773
US-PATENT-CLASS-128-2.05R	.....	c52	N79-10724	US-PATENT-CLASS-128-329R	.....	c52	N79-27836
US-PATENT-CLASS-128-2.05S	.....	c52	N74-26626	US-PATENT-CLASS-128-346	.....	c52	N81-25660
US-PATENT-CLASS-128-2.05T	.....	c52	N74-12778	US-PATENT-CLASS-128-348	.....	c52	N80-16725
US-PATENT-CLASS-128-2.05V	.....	c35	N76-24525	US-PATENT-CLASS-128-379	.....	c52	N77-14736
US-PATENT-CLASS-128-2.05Z	.....	c54	N75-27760	US-PATENT-CLASS-128-400	.....	c52	N77-14736
US-PATENT-CLASS-128-2.06	.....	c52	N79-18580	US-PATENT-CLASS-128-402	.....	c05	N72-20096
US-PATENT-CLASS-128-2.06	.....	c05	N69-21925	US-PATENT-CLASS-128-402	.....	c52	N77-14736
US-PATENT-CLASS-128-2.06	.....	c05	N71-22896	US-PATENT-CLASS-128-410	.....	c52	N77-28717
US-PATENT-CLASS-128-2.06	.....	c09	N71-24618	US-PATENT-CLASS-128-417	.....	c05	N72-25120
US-PATENT-CLASS-128-2.06	.....	c05	N71-26293	US-PATENT-CLASS-128-417	.....	c05	N72-27103

US-PATENT-CLASS-128-418	c52 N76-29896	US-PATENT-CLASS-136-89PC	c44 N79-31753
US-PATENT-CLASS-128-418	c52 N77-14738	US-PATENT-CLASS-136-89SG	c44 N78-24609
US-PATENT-CLASS-128-419P	c52 N76-29896	US-PATENT-CLASS-136-89SG	c44 N80-24741
US-PATENT-CLASS-128-639	c52 N79-27836	US-PATENT-CLASS-136-89SJ	c44 N78-13526
US-PATENT-CLASS-128-642	c52 N80-27072	US-PATENT-CLASS-136-89SJ	c44 N79-11467
US-PATENT-CLASS-128-642	c52 N81-14612	US-PATENT-CLASS-136-89SJ	c44 N79-14528
US-PATENT-CLASS-128-642	c52 N81-20703	US-PATENT-CLASS-136-89SJ	c44 N79-25482
US-PATENT-CLASS-128-660	c52 N79-26771	US-PATENT-CLASS-136-90	c44 N76-14601
US-PATENT-CLASS-128-665	c52 N81-27783	US-PATENT-CLASS-136-100R	c03 N72-20034
US-PATENT-CLASS-128-666	c52 N80-23969	US-PATENT-CLASS-136-114	c44 N76-14601
US-PATENT-CLASS-128-690	c52 N80-23969	US-PATENT-CLASS-136-132	c03 N71-11053
US-PATENT-CLASS-128-748	c52 N80-18691	US-PATENT-CLASS-136-132	c03 N71-22974
US-PATENT-CLASS-128-760	c52 N80-18690	US-PATENT-CLASS-136-133	c15 N69-24320
US-PATENT-CLASS-128-760	c52 N81-29763	US-PATENT-CLASS-136-133	c03 N71-23006
US-PATENT-CLASS-128-761	c52 N81-24711	US-PATENT-CLASS-136-133	c03 N72-15986
US-PATENT-CLASS-128-774	c52 N80-27072	US-PATENT-CLASS-136-135	c03 N72-15986
US-PATENT-CLASS-128-774	c52 N81-20703	US-PATENT-CLASS-136-143	c44 N76-29699
US-PATENT-CLASS-128-782	c52 N80-27072	US-PATENT-CLASS-136-146	c03 N69-21337
US-PATENT-CLASS-128-903	c52 N80-18691	US-PATENT-CLASS-136-146	c24 N76-14204
US-PATENT-CLASS-129-16.7	c08 N71-15908	US-PATENT-CLASS-136-148	c24 N76-14204
US-PATENT-CLASS-134-17	c43 N81-26509	US-PATENT-CLASS-136-162	c44 N76-14601
US-PATENT-CLASS-134-21	c37 N76-18456	US-PATENT-CLASS-136-166	c03 N71-23336
US-PATENT-CLASS-134-37	c37 N76-18456	US-PATENT-CLASS-136-166	c03 N72-20032
US-PATENT-CLASS-135-1	c32 N70-36536	US-PATENT-CLASS-136-170	c03 N71-11051
US-PATENT-CLASS-136-6	c03 N71-26084	US-PATENT-CLASS-136-175	c03 N72-20034
US-PATENT-CLASS-136-6	c03 N72-15986	US-PATENT-CLASS-136-179	c03 N70-41864
US-PATENT-CLASS-136-6LF	c44 N76-18643	US-PATENT-CLASS-136-182	c03 N71-10728
US-PATENT-CLASS-136-20	c44 N74-19693	US-PATENT-CLASS-136-182	c03 N71-20407
US-PATENT-CLASS-136-24	c09 N73-32108	US-PATENT-CLASS-136-182	c03 N71-20491
US-PATENT-CLASS-136-28	c03 N71-10608	US-PATENT-CLASS-136-182	c44 N74-27519
US-PATENT-CLASS-136-30	c44 N74-19693	US-PATENT-CLASS-136-182	c44 N76-14601
US-PATENT-CLASS-136-30	c44 N76-18643	US-PATENT-CLASS-136-202	c09 N72-12136
US-PATENT-CLASS-136-30	c44 N76-29699	US-PATENT-CLASS-136-202	c03 N72-26031
US-PATENT-CLASS-136-36	c44 N74-19692	US-PATENT-CLASS-136-202	c44 N76-16612
US-PATENT-CLASS-136-79	c03 N72-20032	US-PATENT-CLASS-136-202	c35 N77-32454
US-PATENT-CLASS-136-81	c03 N72-20032	US-PATENT-CLASS-136-202	c35 N79-14346
US-PATENT-CLASS-136-83	c03 N71-28579	US-PATENT-CLASS-136-206	c03 N72-11062
US-PATENT-CLASS-136-83R	c03 N72-20034	US-PATENT-CLASS-136-206	c09 N72-12136
US-PATENT-CLASS-136-83R	c44 N76-18641	US-PATENT-CLASS-136-206	c44 N76-14595
US-PATENT-CLASS-136-86	c03 N71-11052	US-PATENT-CLASS-136-206	c44 N76-31666
US-PATENT-CLASS-136-86	c03 N71-20904	US-PATENT-CLASS-136-210	c44 N76-16612
US-PATENT-CLASS-136-86	c15 N71-23022	US-PATENT-CLASS-136-211	c35 N76-15434
US-PATENT-CLASS-136-86	c03 N71-29044	US-PATENT-CLASS-136-212	c35 N76-15434
US-PATENT-CLASS-136-86A	c44 N76-27664	US-PATENT-CLASS-136-213	c14 N69-27459
US-PATENT-CLASS-136-86S	c44 N76-18641	US-PATENT-CLASS-136-213	c34 N74-27861
US-PATENT-CLASS-136-89	c03 N69-24267	US-PATENT-CLASS-136-224	c14 N73-12447
US-PATENT-CLASS-136-89	c03 N71-11049	US-PATENT-CLASS-136-225	c14 N73-24472
US-PATENT-CLASS-136-89	c03 N71-11050	US-PATENT-CLASS-136-225	c35 N76-15434
US-PATENT-CLASS-136-89	c03 N71-11056	US-PATENT-CLASS-136-227	c09 N72-12136
US-PATENT-CLASS-136-89	c03 N71-18698	US-PATENT-CLASS-136-228	c33 N71-15568
US-PATENT-CLASS-136-89	c03 N71-19545	US-PATENT-CLASS-136-230	c14 N71-23039
US-PATENT-CLASS-136-89	c03 N71-20492	US-PATENT-CLASS-136-230	c34 N74-27861
US-PATENT-CLASS-136-89	c03 N71-20895	US-PATENT-CLASS-136-232	c35 N77-14409
US-PATENT-CLASS-136-89	c26 N71-23043	US-PATENT-CLASS-136-233	c14 N72-27410
US-PATENT-CLASS-136-89	c03 N71-23187	US-PATENT-CLASS-136-233	c14 N73-13417
US-PATENT-CLASS-136-89	c03 N71-23449	US-PATENT-CLASS-136-233	c34 N74-27861
US-PATENT-CLASS-136-89	c03 N71-33409	US-PATENT-CLASS-136-233	c35 N77-14409
US-PATENT-CLASS-136-89	c03 N72-20031	US-PATENT-CLASS-136-236	c35 N79-14346
US-PATENT-CLASS-136-89	c03 N72-22042	US-PATENT-CLASS-136-236R	c35 N77-32454
US-PATENT-CLASS-136-89	c31 N72-22674	US-PATENT-CLASS-136-240	c35 N77-32454
US-PATENT-CLASS-136-89	c03 N72-24037	US-PATENT-CLASS-136-249	c44 N81-12542
US-PATENT-CLASS-136-89	c09 N72-25259	US-PATENT-CLASS-136-255	c44 N81-29525
US-PATENT-CLASS-136-89	c03 N72-27053	US-PATENT-CLASS-136-258	c44 N81-19558
US-PATENT-CLASS-136-89	c09 N73-32109	US-PATENT-CLASS-136-258	c44 N81-29525
US-PATENT-CLASS-136-89	c44 N74-14784	US-PATENT-CLASS-136-262	c44 N81-29525
US-PATENT-CLASS-136-89	c44 N76-14600	US-PATENT-CLASS-136-291	c44 N81-12542
US-PATENT-CLASS-136-89	c44 N76-28635	US-PATENT-CLASS-137-DIG.9	c54 N76-24900
US-PATENT-CLASS-136-89	c44 N76-31666	US-PATENT-CLASS-137-1	c12 N70-38997
US-PATENT-CLASS-136-89	c44 N77-10635	US-PATENT-CLASS-137-1	c15 N73-27406
US-PATENT-CLASS-136-89	c44 N77-14580	US-PATENT-CLASS-137-13	c15 N71-15967
US-PATENT-CLASS-136-89	c44 N77-19571	US-PATENT-CLASS-137-13	c15 N72-33477
US-PATENT-CLASS-136-89	c44 N75-11468	US-PATENT-CLASS-137-14	c37 N79-33468
US-PATENT-CLASS-136-89AC	c44 N77-31601	US-PATENT-CLASS-137-15.1	c02 N74-20646
US-PATENT-CLASS-136-89CA	c44 N75-25482	US-PATENT-CLASS-137-15.1	c07 N74-31270
US-PATENT-CLASS-136-89CC	c44 N78-25527	US-PATENT-CLASS-137-15.1	c07 N75-24736
US-PATENT-CLASS-136-89CC	c44 N78-25529	US-PATENT-CLASS-137-15.1	c07 N77-18154
US-PATENT-CLASS-136-89CC	c44 N79-11467	US-PATENT-CLASS-137-15.1	c07 N79-14096
US-PATENT-CLASS-136-89CC	c44 N79-17314	US-PATENT-CLASS-137-15.1	c05 N79-24976
US-PATENT-CLASS-136-89CC	c44 N79-25482	US-PATENT-CLASS-137-15.1	c07 N81-14999
US-PATENT-CLASS-136-89CC	c44 N79-31752	US-PATENT-CLASS-137-15.2	c02 N74-20646
US-PATENT-CLASS-136-89H	c44 N78-25528	US-PATENT-CLASS-137-15.2	c35 N76-14431
US-PATENT-CLASS-136-89H	c44 N78-25529	US-PATENT-CLASS-137-81	c05 N72-20097
US-PATENT-CLASS-136-89P	c44 N77-31601	US-PATENT-CLASS-137-81	c14 N73-13418
US-PATENT-CLASS-136-89P	c44 N78-25528	US-PATENT-CLASS-137-81.5	c12 N69-21466
US-PATENT-CLASS-136-89P	c44 N78-25529	US-PATENT-CLASS-137-81.5	c15 N71-15609
US-PATENT-CLASS-136-89P	c44 N78-27515	US-PATENT-CLASS-137-81.5	c12 N71-17578
US-PATENT-CLASS-136-89P	c44 N79-17314	US-PATENT-CLASS-137-81.5	c12 N71-17579
US-PATENT-CLASS-136-89P	c44 N80-14474	US-PATENT-CLASS-137-81.5	c10 N71-25899
US-PATENT-CLASS-136-89PC	c44 N79-25482	US-PATENT-CLASS-137-81.5	c12 N71-27332

US-PATENT-CLASS-137-81.5	c12	N71-28741	US-PATENT-CLASS-140-124	c15	N71-10809
US-PATENT-CLASS-137-81.5	c28	N72-22772	US-PATENT-CLASS-141-4	c35	N78-10428
US-PATENT-CLASS-137-81.5	c15	N72-33477	US-PATENT-CLASS-141-5	c33	N71-20834
US-PATENT-CLASS-137-81.5	c15	N73-13462	US-PATENT-CLASS-141-23	c15	N72-21465
US-PATENT-CLASS-137-81.5	c28	N73-13773	US-PATENT-CLASS-141-91	c12	N71-21089
US-PATENT-CLASS-137-101	c67	N77-23106	US-PATENT-CLASS-141-197	c35	N78-10428
US-PATENT-CLASS-137-104	c37	N78-10467	US-PATENT-CLASS-141-258	c14	N71-27005
US-PATENT-CLASS-137-110	c54	N76-24900	US-PATENT-CLASS-148-1.5	c26	N71-10607
US-PATENT-CLASS-137-154	c15	N73-27406	US-PATENT-CLASS-148-1.5	c26	N71-23654
US-PATENT-CLASS-137-177	c20	N80-10278	US-PATENT-CLASS-148-1.5	c76	N74-20329
US-PATENT-CLASS-137-197	c15	N70-41646	US-PATENT-CLASS-148-1.5	c44	N80-29835
US-PATENT-CLASS-137-197	c35	N78-12390	US-PATENT-CLASS-148-1.5	c33	N81-26360
US-PATENT-CLASS-137-207	c34	N77-30399	US-PATENT-CLASS-148-2	c26	N77-20201
US-PATENT-CLASS-137-209	c34	N77-30399	US-PATENT-CLASS-148-2	c26	N79-22271
US-PATENT-CLASS-137-209	c20	N80-10278	US-PATENT-CLASS-148-6	c18	N71-29040
US-PATENT-CLASS-137-340	c15	N70-34817	US-PATENT-CLASS-148-6	c76	N79-16678
US-PATENT-CLASS-137-340	c15	N70-35087	US-PATENT-CLASS-148-6.3	c17	N71-33408
US-PATENT-CLASS-137-341	c12	N71-17661	US-PATENT-CLASS-148-6.3	c44	N79-18444
US-PATENT-CLASS-137-375	c37	N80-23654	US-PATENT-CLASS-148-6.11	c15	N71-28475
US-PATENT-CLASS-137-397	c15	N73-26472	US-PATENT-CLASS-148-6.16	c18	N71-23047
US-PATENT-CLASS-137-469	c05	N72-20097	US-PATENT-CLASS-148-6.20	c17	N71-23828
US-PATENT-CLASS-137-484.2	c34	N78-25351	US-PATENT-CLASS-148-11.5B	c15	N73-13465
US-PATENT-CLASS-137-487.5	c14	N73-13418	US-PATENT-CLASS-148-12.4	c26	N79-22271
US-PATENT-CLASS-137-491	c15	N69-21924	US-PATENT-CLASS-148-12.7A	c26	N78-24333
US-PATENT-CLASS-137-493	c52	N81-25660	US-PATENT-CLASS-148-12.7N	c26	N77-20201
US-PATENT-CLASS-137-495	c15	N70-38603	US-PATENT-CLASS-148-12F	c26	N79-22271
US-PATENT-CLASS-137-496	c15	N71-22706	US-PATENT-CLASS-148-13	c14	N71-25892
US-PATENT-CLASS-137-501	c34	N78-25351	US-PATENT-CLASS-148-20.3	c26	N77-20201
US-PATENT-CLASS-137-505.12	c14	N71-18625	US-PATENT-CLASS-148-32	c26	N77-32279
US-PATENT-CLASS-137-505.16	c34	N78-25351	US-PATENT-CLASS-148-32	c26	N78-18183
US-PATENT-CLASS-137-505.25	c37	N78-25426	US-PATENT-CLASS-148-32	c26	N80-23419
US-PATENT-CLASS-137-505.38	c37	N75-15050	US-PATENT-CLASS-148-32.5	c17	N72-22535
US-PATENT-CLASS-137-505.42	c37	N75-15050	US-PATENT-CLASS-148-32.5	c26	N77-20201
US-PATENT-CLASS-137-515.3	c37	N76-14463	US-PATENT-CLASS-148-32.5	c26	N77-32280
US-PATENT-CLASS-137-516.27	c15	N73-30459	US-PATENT-CLASS-148-32.5	c26	N78-18183
US-PATENT-CLASS-137-535	c15	N73-30459	US-PATENT-CLASS-148-121	c76	N79-16678
US-PATENT-CLASS-137-535	c05	N73-32014	US-PATENT-CLASS-148-125	c26	N78-24333
US-PATENT-CLASS-137-538	c05	N73-25125	US-PATENT-CLASS-148-126	c17	N71-24142
US-PATENT-CLASS-137-539	c15	N70-41811	US-PATENT-CLASS-148-126	c18	N71-26153
US-PATENT-CLASS-137-549	c37	N81-17433	US-PATENT-CLASS-148-126	c18	N71-28729
US-PATENT-CLASS-137-550	c37	N76-14463	US-PATENT-CLASS-148-126	c26	N74-10521
US-PATENT-CLASS-137-554	c09	N71-23191	US-PATENT-CLASS-148-127	c26	N75-29236
US-PATENT-CLASS-137-559	c11	N73-12265	US-PATENT-CLASS-148-131	c26	N80-28492
US-PATENT-CLASS-137-574	c20	N80-10278	US-PATENT-CLASS-148-162	c26	N77-20201
US-PATENT-CLASS-137-576	c20	N80-10278	US-PATENT-CLASS-148-174	c26	N71-29156
US-PATENT-CLASS-137-582	c32	N71-16103	US-PATENT-CLASS-148-174	c44	N76-28635
US-PATENT-CLASS-137-582	c32	N71-16106	US-PATENT-CLASS-148-174	c44	N78-24609
US-PATENT-CLASS-137-582	c15	N71-19569	US-PATENT-CLASS-148-175	c25	N75-26043
US-PATENT-CLASS-137-582	c15	N73-26472	US-PATENT-CLASS-148-175	c76	N76-25049
US-PATENT-CLASS-137-590	c20	N80-10278	US-PATENT-CLASS-148-175	c44	N76-28635
US-PATENT-CLASS-137-594	c12	N71-18615	US-PATENT-CLASS-148-187	c26	N72-17820
US-PATENT-CLASS-137-604	c15	N73-27406	US-PATENT-CLASS-148-187	c14	N72-28438
US-PATENT-CLASS-137-608	c15	N73-13462	US-PATENT-CLASS-148-187	c33	N81-26360
US-PATENT-CLASS-137-614	c15	N70-36492	US-PATENT-CLASS-148-188	c24	N71-10560
US-PATENT-CLASS-137-614.06	c37	N79-11402	US-PATENT-CLASS-148-188	c09	N71-12513
US-PATENT-CLASS-137-615	c12	N71-16031	US-PATENT-CLASS-148-188	c44	N79-11468
US-PATENT-CLASS-137-624.11	c35	N78-19466	US-PATENT-CLASS-149-1	c23	N71-16212
US-PATENT-CLASS-137-624.14	c03	N69-21469	US-PATENT-CLASS-149-1	c06	N73-30097
US-PATENT-CLASS-137-625.3	c37	N78-25426	US-PATENT-CLASS-149-1	c28	N80-20402
US-PATENT-CLASS-137-625.4	c37	N80-23654	US-PATENT-CLASS-149-1	c28	N81-14103
US-PATENT-CLASS-137-625.5	c15	N71-23051	US-PATENT-CLASS-149-2	c12	N70-40124
US-PATENT-CLASS-137-625.38	c37	N78-25426	US-PATENT-CLASS-149-15	c44	N80-20808
US-PATENT-CLASS-137-625.69	c15	N70-36908	US-PATENT-CLASS-149-17	c28	N74-33209
US-PATENT-CLASS-137-628	c37	N74-21065	US-PATENT-CLASS-149-19	c27	N71-14090
US-PATENT-CLASS-137-637.05	c37	N79-11402	US-PATENT-CLASS-149-19	c27	N72-25699
US-PATENT-CLASS-137-819	c33	N74-11050	US-PATENT-CLASS-149-19	c27	N73-16764
US-PATENT-CLASS-137-833	c33	N74-11050	US-PATENT-CLASS-149-19.2	c28	N80-28536
US-PATENT-CLASS-137-840	c33	N74-11050	US-PATENT-CLASS-149-19.4	c28	N78-31255
US-PATENT-CLASS-137-886	c37	N81-17433	US-PATENT-CLASS-149-19.4	c20	N78-32179
US-PATENT-CLASS-137-887	c37	N81-17433	US-PATENT-CLASS-149-19.4	c28	N79-28342
US-PATENT-CLASS-138-8R	c27	N81-15104	US-PATENT-CLASS-149-19.8	c28	N78-31255
US-PATENT-CLASS-138-4	c15	N71-18580	US-PATENT-CLASS-149-19.9	c28	N79-14228
US-PATENT-CLASS-138-33	c52	N80-16725	US-PATENT-CLASS-149-19.9	c28	N79-28342
US-PATENT-CLASS-138-42	c15	N71-15608	US-PATENT-CLASS-149-19.9	c28	N80-28536
US-PATENT-CLASS-138-43	c15	N71-19213	US-PATENT-CLASS-149-19.92	c28	N79-14228
US-PATENT-CLASS-138-45	c15	N71-18580	US-PATENT-CLASS-149-20	c27	N72-25699
US-PATENT-CLASS-138-45	c15	N73-13462	US-PATENT-CLASS-149-20	c28	N79-14228
US-PATENT-CLASS-138-46	c12	N71-18615	US-PATENT-CLASS-149-20	c28	N79-28342
US-PATENT-CLASS-138-96R	c37	N79-22474	US-PATENT-CLASS-149-20	c28	N80-28536
US-PATENT-CLASS-138-103	c52	N80-16725	US-PATENT-CLASS-149-36	c27	N72-25699
US-PATENT-CLASS-138-113	c34	N75-12222	US-PATENT-CLASS-149-36	c27	N73-16764
US-PATENT-CLASS-138-114	c34	N75-12222	US-PATENT-CLASS-149-36	c06	N73-30097
US-PATENT-CLASS-138-119	c32	N70-41579	US-PATENT-CLASS-149-36	c24	N76-14203
US-PATENT-CLASS-138-133	c52	N80-16725	US-PATENT-CLASS-149-37	c44	N80-20808
US-PATENT-CLASS-138-148	c34	N75-12222	US-PATENT-CLASS-149-42	c20	N78-32179
US-PATENT-CLASS-138-178	c15	N72-20445	US-PATENT-CLASS-149-43	c20	N78-32179
US-PATENT-CLASS-139-425R	c28	N72-11708	US-PATENT-CLASS-149-44	c20	N78-32179
US-PATENT-CLASS-140-105	c15	N72-12408	US-PATENT-CLASS-149-60	c28	N74-33209
US-PATENT-CLASS-140-123	c15	N71-15518	US-PATENT-CLASS-149-76	c28	N74-33209

US-PATENT-CLASS-149-76	.....	C20 N78-32179	US-PATENT-CLASS-156-285	.....	C24 N81-29163
US-PATENT-CLASS-149-83	.....	C20 N78-32179	US-PATENT-CLASS-156-285	.....	C24 N81-33235
US-PATENT-CLASS-149-85	.....	C20 N78-32179	US-PATENT-CLASS-156-286	.....	C37 N76-21554
US-PATENT-CLASS-149-88	.....	C28 N78-31255	US-PATENT-CLASS-156-286	.....	C37 N76-24575
US-PATENT-CLASS-149-92	.....	C27 N72-25699	US-PATENT-CLASS-156-286	.....	C24 N78-17150
US-PATENT-CLASS-149-92	.....	C28 N78-31255	US-PATENT-CLASS-156-289	.....	C24 N78-17149
US-PATENT-CLASS-149-93	.....	C28 N78-31255	US-PATENT-CLASS-156-289	.....	C24 N78-17150
US-PATENT-CLASS-149-105	.....	C28 N78-31255	US-PATENT-CLASS-156-290	.....	C24 N81-33235
US-PATENT-CLASS-149-108.4	.....	C28 N80-23471	US-PATENT-CLASS-156-292	.....	C27 N80-32516
US-PATENT-CLASS-149-108.4	.....	C28 N81-15119	US-PATENT-CLASS-156-292	.....	C24 N81-17170
US-PATENT-CLASS-149-109	.....	C27 N70-41897	US-PATENT-CLASS-156-294	.....	C37 N81-14317
US-PATENT-CLASS-149-111	.....	C28 N78-31255	US-PATENT-CLASS-156-294	.....	C24 N81-29163
US-PATENT-CLASS-150-1	.....	C52 N79-14749	US-PATENT-CLASS-156-295	.....	C27 N81-14077
US-PATENT-CLASS-150-11	.....	C37 N81-14317	US-PATENT-CLASS-156-300	.....	C24 N78-17150
US-PATENT-CLASS-151-41.76	.....	C37 N80-23653	US-PATENT-CLASS-156-303	.....	C44 N80-18550
US-PATENT-CLASS-152-11	.....	C31 N71-18611	US-PATENT-CLASS-156-306	.....	C24 N78-17150
US-PATENT-CLASS-152-225	.....	C15 N71-27091	US-PATENT-CLASS-156-308	.....	C05 N72-25121
US-PATENT-CLASS-152-250	.....	C15 N71-27091	US-PATENT-CLASS-156-309	.....	C31 N74-18089
US-PATENT-CLASS-152-330RF	.....	C37 N81-24443	US-PATENT-CLASS-156-309	.....	C27 N78-17205
US-PATENT-CLASS-152-353G	.....	C37 N81-24443	US-PATENT-CLASS-156-311	.....	C24 N78-17150
US-PATENT-CLASS-152-353R	.....	C37 N81-24443	US-PATENT-CLASS-156-312	.....	C44 N80-18550
US-PATENT-CLASS-152-379.4	.....	C37 N81-24443	US-PATENT-CLASS-156-320	.....	C15 N72-11392
US-PATENT-CLASS-156-DIG.6-8	.....	C76 N79-23798	US-PATENT-CLASS-156-323	.....	C27 N81-14077
US-PATENT-CLASS-156-DIG.62	.....	C76 N77-32519	US-PATENT-CLASS-156-330	.....	C24 N81-14000
US-PATENT-CLASS-156-DIG.64	.....	C76 N79-11920	US-PATENT-CLASS-156-331	.....	C37 N78-18126
US-PATENT-CLASS-156-DIG.64	.....	C44 N80-24741	US-PATENT-CLASS-156-331	.....	C27 N78-17205
US-PATENT-CLASS-156-DIG.64	.....	C76 N80-32245	US-PATENT-CLASS-156-331	.....	C24 N79-16915
US-PATENT-CLASS-156-DIG.65	.....	C76 N79-11920	US-PATENT-CLASS-156-331	.....	C27 N81-14077
US-PATENT-CLASS-156-DIG.88	.....	C76 N79-11920	US-PATENT-CLASS-156-344	.....	C28 N81-14103
US-PATENT-CLASS-156-DIG.88	.....	C76 N80-32245	US-PATENT-CLASS-156-345	.....	C15 N70-42033
US-PATENT-CLASS-156-DIG.96	.....	C76 N80-32244	US-PATENT-CLASS-156-382	.....	C37 N76-21554
US-PATENT-CLASS-156-DIG.96	.....	C33 N81-19389	US-PATENT-CLASS-156-510	.....	C15 N71-17687
US-PATENT-CLASS-156-3	.....	C17 N71-16044	US-PATENT-CLASS-156-510	.....	C03 N72-25019
US-PATENT-CLASS-156-3	.....	C15 N71-21404	US-PATENT-CLASS-156-545	.....	C15 N71-24164
US-PATENT-CLASS-156-3	.....	C15 N71-24047	US-PATENT-CLASS-156-556	.....	C37 N76-21554
US-PATENT-CLASS-156-3	.....	C06 N72-21094	US-PATENT-CLASS-156-601	.....	C76 N77-32919
US-PATENT-CLASS-156-7	.....	C74 N75-12732	US-PATENT-CLASS-156-601	.....	C76 N80-32245
US-PATENT-CLASS-156-16	.....	C74 N75-12732	US-PATENT-CLASS-156-605	.....	C44 N80-24741
US-PATENT-CLASS-156-17	.....	C76 N79-21910	US-PATENT-CLASS-156-608	.....	C76 N79-11920
US-PATENT-CLASS-156-18	.....	C26 N73-26752	US-PATENT-CLASS-156-608	.....	C33 N81-19389
US-PATENT-CLASS-156-18	.....	C74 N75-12732	US-PATENT-CLASS-156-610	.....	C76 N76-25049
US-PATENT-CLASS-156-52	.....	C31 N79-21226	US-PATENT-CLASS-156-612	.....	C76 N76-25049
US-PATENT-CLASS-156-60	.....	C15 N71-22713	US-PATENT-CLASS-156-612	.....	C44 N76-28635
US-PATENT-CLASS-156-66	.....	C15 N72-11392	US-PATENT-CLASS-156-613	.....	C76 N76-25049
US-PATENT-CLASS-156-74	.....	C24 N81-29163	US-PATENT-CLASS-156-613	.....	C44 N76-28635
US-PATENT-CLASS-156-84	.....	C15 N72-16330	US-PATENT-CLASS-156-614	.....	C44 N76-28635
US-PATENT-CLASS-156-86	.....	C15 N72-16330	US-PATENT-CLASS-156-617SP	.....	C76 N79-11920
US-PATENT-CLASS-156-89	.....	C37 N75-15992	US-PATENT-CLASS-156-617SP	.....	C76 N79-23798
US-PATENT-CLASS-156-89	.....	C24 N79-25143	US-PATENT-CLASS-156-617SP	.....	C44 N80-24741
US-PATENT-CLASS-156-94	.....	C32 N74-27612	US-PATENT-CLASS-156-617SP	.....	C76 N80-32245
US-PATENT-CLASS-156-94	.....	C24 N74-30001	US-PATENT-CLASS-156-619	.....	C76 N77-32919
US-PATENT-CLASS-156-99	.....	C37 N75-15992	US-PATENT-CLASS-156-620	.....	C76 N77-32919
US-PATENT-CLASS-156-104	.....	C44 N80-18550	US-PATENT-CLASS-156-633	.....	C44 N78-25529
US-PATENT-CLASS-156-154	.....	C24 N78-17150	US-PATENT-CLASS-156-645	.....	C27 N77-32308
US-PATENT-CLASS-156-154	.....	C27 N81-14077	US-PATENT-CLASS-156-647	.....	C33 N81-26360
US-PATENT-CLASS-156-160	.....	C27 N81-14077	US-PATENT-CLASS-156-648	.....	C33 N81-26360
US-PATENT-CLASS-156-161	.....	C24 N81-29163	US-PATENT-CLASS-156-649	.....	C33 N81-26360
US-PATENT-CLASS-156-163	.....	C27 N81-14077	US-PATENT-CLASS-156-663	.....	C27 N77-32308
US-PATENT-CLASS-156-165	.....	C24 N81-29163	US-PATENT-CLASS-161-7	.....	C18 N72-25540
US-PATENT-CLASS-156-172	.....	C15 N71-17651	US-PATENT-CLASS-161-7	.....	C18 N72-25541
US-PATENT-CLASS-156-212	.....	C03 N71-26726	US-PATENT-CLASS-161-42	.....	C37 N74-18126
US-PATENT-CLASS-156-212	.....	C24 N80-26388	US-PATENT-CLASS-161-43	.....	C37 N74-18126
US-PATENT-CLASS-156-212	.....	C27 N81-14077	US-PATENT-CLASS-161-67	.....	C33 N72-17947
US-PATENT-CLASS-156-213	.....	C24 N80-26388	US-PATENT-CLASS-161-68	.....	C18 N71-21651
US-PATENT-CLASS-156-218	.....	C54 N74-32546	US-PATENT-CLASS-161-68	.....	C18 N72-25540
US-PATENT-CLASS-156-229	.....	C24 N77-28225	US-PATENT-CLASS-161-68	.....	C18 N72-25541
US-PATENT-CLASS-156-242	.....	C15 N69-24322	US-PATENT-CLASS-161-69	.....	C33 N71-24858
US-PATENT-CLASS-156-242	.....	C37 N76-24575	US-PATENT-CLASS-161-89	.....	C17 N71-28747
US-PATENT-CLASS-156-242	.....	C24 N81-33235	US-PATENT-CLASS-161-92	.....	C37 N75-26371
US-PATENT-CLASS-156-245	.....	C31 N74-18089	US-PATENT-CLASS-161-93	.....	C18 N73-12604
US-PATENT-CLASS-156-245	.....	C24 N78-17149	US-PATENT-CLASS-161-93	.....	C37 N74-18126
US-PATENT-CLASS-156-245	.....	C24 N81-33235	US-PATENT-CLASS-161-93	.....	C37 N75-26371
US-PATENT-CLASS-156-247	.....	C31 N74-18089	US-PATENT-CLASS-161-115	.....	C18 N70-41583
US-PATENT-CLASS-156-250	.....	C03 N72-25019	US-PATENT-CLASS-161-116	.....	C37 N74-23064
US-PATENT-CLASS-156-252	.....	C24 N81-33235	US-PATENT-CLASS-161-127	.....	C18 N72-25540
US-PATENT-CLASS-156-264	.....	C05 N72-25121	US-PATENT-CLASS-161-127	.....	C18 N72-25541
US-PATENT-CLASS-156-264	.....	C24 N78-17150	US-PATENT-CLASS-161-161	.....	C33 N71-25351
US-PATENT-CLASS-156-264	.....	C24 N81-33235	US-PATENT-CLASS-161-182	.....	C15 N69-39735
US-PATENT-CLASS-156-267	.....	C27 N81-14077	US-PATENT-CLASS-161-182	.....	C37 N74-18126
US-PATENT-CLASS-156-272	.....	C27 N80-32516	US-PATENT-CLASS-161-189	.....	C23 N71-15978
US-PATENT-CLASS-156-278	.....	C44 N80-18550	US-PATENT-CLASS-161-192	.....	C37 N74-18126
US-PATENT-CLASS-156-285	.....	C15 N71-23052	US-PATENT-CLASS-161-196	.....	C37 N74-21063
US-PATENT-CLASS-156-285	.....	C18 N73-30532	US-PATENT-CLASS-161-214	.....	C06 N73-27980
US-PATENT-CLASS-156-285	.....	C31 N74-18089	US-PATENT-CLASS-161-227	.....	C06 N73-27980
US-PATENT-CLASS-156-285	.....	C24 N74-27035	US-PATENT-CLASS-162-14	.....	C85 N79-17747
US-PATENT-CLASS-156-285	.....	C24 N78-17149	US-PATENT-CLASS-162-29	.....	C85 N79-17747
US-PATENT-CLASS-156-285	.....	C24 N78-17150	US-PATENT-CLASS-162-102	.....	C24 N76-14204
US-PATENT-CLASS-156-285	.....	C44 N80-18550	US-PATENT-CLASS-162-153	.....	C24 N76-14204
US-PATENT-CLASS-156-285	.....	C24 N80-26388	US-PATENT-CLASS-162-222	.....	C24 N76-14204

US-PATENT-CLASS-162-228	C24 N76-14204	US-PATENT-CLASS-169-28	C12 N72-21310
US-PATENT-CLASS-164-60	C24 N77-27187	US-PATENT-CLASS-169-36	C12 N72-21310
US-PATENT-CLASS-164-105	C20 N79-21123	US-PATENT-CLASS-169-62	C31 N81-14137
US-PATENT-CLASS-164-132	C37 N76-23570	US-PATENT-CLASS-169-70	C31 N81-14137
US-PATENT-CLASS-165-1	C09 N70-41717	US-PATENT-CLASS-173-131	C15 N73-13463
US-PATENT-CLASS-165-1	C34 N75-12222	US-PATENT-CLASS-173-132	C37 N76-18454
US-PATENT-CLASS-165-2	C33 N71-24676	US-PATENT-CLASS-174-DIG.6	C26 N73-26752
US-PATENT-CLASS-165-2	C35 N74-15093	US-PATENT-CLASS-174-DIG.6	C26 N73-32571
US-PATENT-CLASS-165-2	C44 N77-32581	US-PATENT-CLASS-174-DIG.8	C33 N74-22865
US-PATENT-CLASS-165-2	C44 N78-17460	US-PATENT-CLASS-174-15C	C33 N74-27683
US-PATENT-CLASS-165-2	C51 N79-10694	US-PATENT-CLASS-174-15CA	C31 N79-17029
US-PATENT-CLASS-165-3	C03 N72-28025	US-PATENT-CLASS-174-18	C09 N69-21542
US-PATENT-CLASS-165-10	C44 N76-31667	US-PATENT-CLASS-174-28	C07 N71-27191
US-PATENT-CLASS-165-12	C33 N71-24276	US-PATENT-CLASS-174-28	C33 N74-27683
US-PATENT-CLASS-165-16	C31 N80-32583	US-PATENT-CLASS-174-35	C07 N71-19436
US-PATENT-CLASS-165-20	C03 N72-28025	US-PATENT-CLASS-174-36	C09 N72-22198
US-PATENT-CLASS-165-30	C51 N79-10694	US-PATENT-CLASS-174-52S	C15 N73-14469
US-PATENT-CLASS-165-30	C31 N79-17029	US-PATENT-CLASS-174-68.5	C15 N70-41960
US-PATENT-CLASS-165-32	C31 N73-30829	US-PATENT-CLASS-174-69	C33 N74-22865
US-PATENT-CLASS-165-32	C33 N73-32818	US-PATENT-CLASS-174-70R	C33 N74-22865
US-PATENT-CLASS-165-32	C34 N78-17337	US-PATENT-CLASS-174-72	C03 N69-21539
US-PATENT-CLASS-165-32	C34 N79-31523	US-PATENT-CLASS-174-73R	C33 N80-18286
US-PATENT-CLASS-165-32	C44 N80-20810	US-PATENT-CLASS-174-84	C15 N72-17455
US-PATENT-CLASS-165-44	C15 N71-26611	US-PATENT-CLASS-174-106R	C09 N72-22198
US-PATENT-CLASS-165-46	C05 N71-19439	US-PATENT-CLASS-174-110.3	C14 N71-27186
US-PATENT-CLASS-165-46	C05 N71-24147	US-PATENT-CLASS-174-111	C33 N74-27683
US-PATENT-CLASS-165-46	C05 N73-20137	US-PATENT-CLASS-174-115	C09 N70-38201
US-PATENT-CLASS-165-46	C05 N73-26071	US-PATENT-CLASS-174-117FF	C09 N72-22198
US-PATENT-CLASS-165-47	C33 N71-29052	US-PATENT-CLASS-174-126CP	C26 N73-32571
US-PATENT-CLASS-165-47	C31 N73-30829	US-PATENT-CLASS-174-142	C33 N80-18286
US-PATENT-CLASS-165-47	C34 N75-12222	US-PATENT-CLASS-174-145	C33 N76-16332
US-PATENT-CLASS-165-86	C15 N71-26611	US-PATENT-CLASS-174-148	C33 N76-16332
US-PATENT-CLASS-165-86	C33 N71-29046	US-PATENT-CLASS-175-1	C46 N79-22679
US-PATENT-CLASS-165-96	C33 N70-36847	US-PATENT-CLASS-175-26	C15 N73-32362
US-PATENT-CLASS-165-96	C33 N71-22890	US-PATENT-CLASS-175-78	C46 N80-10709
US-PATENT-CLASS-165-96	C31 N73-30829	US-PATENT-CLASS-175-310	C15 N70-42034
US-PATENT-CLASS-165-96	C33 N73-32818	US-PATENT-CLASS-175-323	C14 N69-21923
US-PATENT-CLASS-165-96	C34 N78-17337	US-PATENT-CLASS-176-3	C75 N75-13625
US-PATENT-CLASS-165-104	C33 N71-25353	US-PATENT-CLASS-176-11	C24 N72-33681
US-PATENT-CLASS-165-104.14	C05 N81-26114	US-PATENT-CLASS-176-11	C25 N76-27383
US-PATENT-CLASS-165-105	C09 N71-24607	US-PATENT-CLASS-176-11	C25 N76-29379
US-PATENT-CLASS-165-105	C33 N71-25353	US-PATENT-CLASS-176-11	C25 N78-27226
US-PATENT-CLASS-165-105	C33 N72-17948	US-PATENT-CLASS-176-14	C25 N76-29379
US-PATENT-CLASS-165-105	C31 N73-30829	US-PATENT-CLASS-176-16	C25 N76-27383
US-PATENT-CLASS-165-105	C28 N73-32606	US-PATENT-CLASS-176-16	C25 N76-29379
US-PATENT-CLASS-165-105	C34 N74-18552	US-PATENT-CLASS-176-16	C25 N78-27226
US-PATENT-CLASS-165-105	C34 N75-12222	US-PATENT-CLASS-176-22	C73 N78-28913
US-PATENT-CLASS-165-105	C44 N75-32581	US-PATENT-CLASS-176-33	C73 N78-28913
US-PATENT-CLASS-165-105	C44 N76-16612	US-PATENT-CLASS-176-39	C73 N78-19920
US-PATENT-CLASS-165-105	C34 N76-17317	US-PATENT-CLASS-176-39	C73 N78-28913
US-PATENT-CLASS-165-105	C34 N76-27515	US-PATENT-CLASS-176-45	C22 N71-28759
US-PATENT-CLASS-165-105	C34 N77-32413	US-PATENT-CLASS-176-86G	C22 N72-20597
US-PATENT-CLASS-165-105	C25 N78-10224	US-PATENT-CLASS-176-169	C22 N73-32528
US-PATENT-CLASS-165-105	C34 N78-17336	US-PATENT-CLASS-177-1	C35 N77-19385
US-PATENT-CLASS-165-105	C34 N78-17337	US-PATENT-CLASS-177-200	C35 N74-26945
US-PATENT-CLASS-165-105	C44 N79-18443	US-PATENT-CLASS-177-208	C35 N77-19385
US-PATENT-CLASS-165-105	C37 N79-28549	US-PATENT-CLASS-177-210	C14 N71-10773
US-PATENT-CLASS-165-105	C34 N79-31523	US-PATENT-CLASS-177-211	C35 N74-26945
US-PATENT-CLASS-165-105	C35 N81-14287	US-PATENT-CLASS-177-246	C35 N74-26945
US-PATENT-CLASS-165-106	C33 N73-32818	US-PATENT-CLASS-178-DIG.1	C36 N74-20009
US-PATENT-CLASS-165-106	C34 N76-17317	US-PATENT-CLASS-178-DIG.1	C33 N75-30431
US-PATENT-CLASS-165-107	C09 N71-24607	US-PATENT-CLASS-178-DIG.1	C45 N76-17656
US-PATENT-CLASS-165-107	C44 N77-32581	US-PATENT-CLASS-178-DIG.6	C10 N73-13235
US-PATENT-CLASS-165-109	C35 N74-15093	US-PATENT-CLASS-178-DIG.8	C14 N72-25412
US-PATENT-CLASS-165-110	C77 N75-20139	US-PATENT-CLASS-178-DIG.8	C45 N76-17656
US-PATENT-CLASS-165-111	C77 N75-20139	US-PATENT-CLASS-178-DIG.12	C07 N72-12081
US-PATENT-CLASS-165-133	C33 N71-16277	US-PATENT-CLASS-178-DIG.12	C32 N75-21485
US-PATENT-CLASS-165-133	C33 N71-25353	US-PATENT-CLASS-178-DIG.20	C23 N72-27728
US-PATENT-CLASS-165-133	C33 N72-20915	US-PATENT-CLASS-178-DIG.20	C35 N75-19613
US-PATENT-CLASS-165-133	C44 N76-23675	US-PATENT-CLASS-178-DIG.20	C18 N76-14186
US-PATENT-CLASS-165-134	C34 N78-17336	US-PATENT-CLASS-178-DIG.21	C16 N72-13437
US-PATENT-CLASS-165-138	C09 N71-24807	US-PATENT-CLASS-178-DIG.23	C07 N73-30115
US-PATENT-CLASS-165-141	C28 N73-32606	US-PATENT-CLASS-178-DIG.25	C74 N75-25706
US-PATENT-CLASS-165-146	C34 N79-13289	US-PATENT-CLASS-178-DIG.28	C08 N72-22164
US-PATENT-CLASS-165-155	C33 N72-20915	US-PATENT-CLASS-178-DIG.29	C35 N75-25123
US-PATENT-CLASS-165-158	C33 N72-20915	US-PATENT-CLASS-178-DIG.32	C71 N74-21014
US-PATENT-CLASS-165-161	C33 N72-20915	US-PATENT-CLASS-178-DIG.35	C09 N76-24280
US-PATENT-CLASS-165-164	C34 N77-10463	US-PATENT-CLASS-178-DIG.36	C08 N72-22164
US-PATENT-CLASS-165-166	C54 N77-32722	US-PATENT-CLASS-178-5.2R	C09 N71-28618
US-PATENT-CLASS-165-169	C34 N75-13288	US-PATENT-CLASS-178-5.2R	C07 N72-17109
US-PATENT-CLASS-165-169	C34 N79-13289	US-PATENT-CLASS-178-5.4	C07 N72-17109
US-PATENT-CLASS-165-170	C34 N77-10463	US-PATENT-CLASS-178-5.8R	C71 N74-21014
US-PATENT-CLASS-165-174	C33 N72-20915	US-PATENT-CLASS-178-6	C07 N71-19433
US-PATENT-CLASS-165-185	C28 N73-32606	US-PATENT-CLASS-178-6	C09 N71-19449
US-PATENT-CLASS-166-63	C46 N79-22679	US-PATENT-CLASS-178-6	C07 N71-23026
US-PATENT-CLASS-166-77	C43 N81-26509	US-PATENT-CLASS-178-6	C07 N71-26579
US-PATENT-CLASS-166-222	C43 N81-26509	US-PATENT-CLASS-178-6	C07 N72-12081
US-PATENT-CLASS-166-248	C43 N78-14452	US-PATENT-CLASS-178-6	C16 N72-13437
US-PATENT-CLASS-166-259	C43 N78-14452	US-PATENT-CLASS-178-6	C10 N73-13235

US-PATENT-CLASS-178-6	c36	N74-20009	US-PATENT-CLASS-179-15A	c07	N73-26118
US-PATENT-CLASS-178-6.5	c23	N72-27728	US-PATENT-CLASS-179-15AN	c07	N73-16121
US-PATENT-CLASS-178-6.6	c07	N71-11300	US-PATENT-CLASS-179-15AT	c32	N74-30524
US-PATENT-CLASS-178-6.6	c07	N71-26102	US-PATENT-CLASS-179-15BA	c60	N77-12721
US-PATENT-CLASS-178-6.6DD	c07	N73-30115	US-PATENT-CLASS-179-15BA	c32	N80-18252
US-PATENT-CLASS-178-6.6DD	c35	N74-11283	US-PATENT-CLASS-179-15BC	c08	N72-25208
US-PATENT-CLASS-178-6.7	c07	N72-17109	US-PATENT-CLASS-179-15BC	c07	N73-16121
US-PATENT-CLASS-178-6.7B	c35	N74-15831	US-PATENT-CLASS-179-15BC	c32	N74-30523
US-PATENT-CLASS-178-6.8	c08	N72-22164	US-PATENT-CLASS-179-15BC	c33	N75-26243
US-PATENT-CLASS-178-6.8	c14	N72-25412	US-PATENT-CLASS-179-15BL	c08	N72-22162
US-PATENT-CLASS-178-6.8	c07	N73-30115	US-PATENT-CLASS-179-15BM	c07	N73-26118
US-PATENT-CLASS-178-6.8	c33	N75-30431	US-PATENT-CLASS-179-15BS	c10	N71-33407
US-PATENT-CLASS-178-6.8	c45	N76-17656	US-PATENT-CLASS-179-15BS	c07	N72-20140
US-PATENT-CLASS-178-7.1	c07	N71-24612	US-PATENT-CLASS-179-15BS	c07	N73-30115
US-PATENT-CLASS-178-7.1	c07	N71-27341	US-PATENT-CLASS-179-15BS	c32	N75-26195
US-PATENT-CLASS-178-7.1	c09	N72-17156	US-PATENT-CLASS-179-15BS	c60	N77-19760
US-PATENT-CLASS-178-7.1	c32	N74-19790	US-PATENT-CLASS-179-15BV	c07	N72-25172
US-PATENT-CLASS-178-7.1	c36	N75-19652	US-PATENT-CLASS-179-15BY	c32	N74-30524
US-PATENT-CLASS-178-7.2	c14	N70-41607	US-PATENT-CLASS-179-15FD	c08	N72-25208
US-PATENT-CLASS-178-7.2	c71	N74-21014	US-PATENT-CLASS-179-15FS	c07	N73-28012
US-PATENT-CLASS-178-7.2	c35	N75-25123	US-PATENT-CLASS-179-27CA	c32	N79-23310
US-PATENT-CLASS-178-7.2B	c08	N72-22164	US-PATENT-CLASS-179-78	c33	N81-27397
US-PATENT-CLASS-178-7.3	c07	N71-27341	US-PATENT-CLASS-179-84VF	c32	N79-23310
US-PATENT-CLASS-178-7.3	c07	N72-12081	US-PATENT-CLASS-179-91B	c74	N78-14889
US-PATENT-CLASS-178-7.5E	c10	N72-31273	US-PATENT-CLASS-179-100.2	c09	N69-24329
US-PATENT-CLASS-178-7.6	c36	N74-20009	US-PATENT-CLASS-179-100.2	c09	N71-25866
US-PATENT-CLASS-178-7.7	c09	N71-12539	US-PATENT-CLASS-179-100.2	c08	N71-27210
US-PATENT-CLASS-178-7.7	c32	N74-20813	US-PATENT-CLASS-179-100.2	c08	N71-27255
US-PATENT-CLASS-178-7.89	c09	N76-24280	US-PATENT-CLASS-179-100.2A	c21	N73-13644
US-PATENT-CLASS-178-7.92	c14	N72-25414	US-PATENT-CLASS-179-100.2A	c32	N74-27612
US-PATENT-CLASS-178-15	c33	N75-19517	US-PATENT-CLASS-179-100.2B	c32	N74-27612
US-PATENT-CLASS-178-18	c10	N73-32143	US-PATENT-CLASS-179-100.2C	c35	N77-21392
US-PATENT-CLASS-178-50	c08	N72-18184	US-PATENT-CLASS-179-100.2CH	c36	N74-13205
US-PATENT-CLASS-178-50	c08	N72-25208	US-PATENT-CLASS-179-100.2CH	c35	N78-29421
US-PATENT-CLASS-178-52	c08	N72-22162	US-PATENT-CLASS-179-100.2CH	c35	N79-16246
US-PATENT-CLASS-178-54CF	c09	N71-28618	US-PATENT-CLASS-179-100.2K	c07	N72-21119
US-PATENT-CLASS-178-54FE	c09	N71-28618	US-PATENT-CLASS-179-100.2HD	c35	N74-11283
US-PATENT-CLASS-178-58A	c32	N75-21486	US-PATENT-CLASS-179-100.2T	c35	N74-11283
US-PATENT-CLASS-178-58R	c32	N80-18252	US-PATENT-CLASS-179-100-2CA	c09	N72-11224
US-PATENT-CLASS-178-66	c09	N71-25866	US-PATENT-CLASS-179-100-2HD	c09	N72-11224
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US-PATENT-CLASS-250-203B	c14	N73-28490	US-PATENT-CLASS-250-277CH	c74	N80-21140
US-PATENT-CLASS-250-203B	.....	c21	N73-30640	US-PATENT-CLASS-250-280	.....	c76	N78-24950
US-PATENT-CLASS-250-203B	.....	c19	N74-15089	US-PATENT-CLASS-250-280	.....	c74	N80-21140
US-PATENT-CLASS-250-203B	.....	c89	N74-30686	US-PATENT-CLASS-250-281	.....	c35	N74-34857
US-PATENT-CLASS-250-203B	.....	c35	N77-20401	US-PATENT-CLASS-250-281	.....	c35	N76-16393
US-PATENT-CLASS-250-203B	.....	c74	N77-22951	US-PATENT-CLASS-250-281	.....	c36	N77-26477
US-PATENT-CLASS-250-203B	.....	c44	N81-24520	US-PATENT-CLASS-250-281	.....	c72	N80-14877
US-PATENT-CLASS-250-203X	.....	c16	N72-13437	US-PATENT-CLASS-250-282	.....	c36	N77-26477
US-PATENT-CLASS-250-204	.....	c36	N74-21091	US-PATENT-CLASS-250-282	.....	c72	N80-14877
US-PATENT-CLASS-250-205	.....	c14	N72-27411	US-PATENT-CLASS-250-283	.....	c36	N77-26477
US-PATENT-CLASS-250-205	.....	c09	N73-14214	US-PATENT-CLASS-250-287	.....	c35	N76-15431
US-PATENT-CLASS-250-205	.....	c36	N74-13205	US-PATENT-CLASS-250-287	.....	c35	N76-16393
US-PATENT-CLASS-250-206	.....	c10	N71-20782	US-PATENT-CLASS-250-288	.....	c35	N76-16393
US-PATENT-CLASS-250-207	.....	c14	N72-17328	US-PATENT-CLASS-250-288	.....	c35	N77-32456
US-PATENT-CLASS-250-207	.....	c14	N73-32317	US-PATENT-CLASS-250-289	.....	c35	N77-14406
US-PATENT-CLASS-250-207	.....	c33	N74-27682	US-PATENT-CLASS-250-290	.....	c35	N77-10492
US-PATENT-CLASS-250-208	.....	c14	N72-20379	US-PATENT-CLASS-250-291	.....	c35	N77-10492
US-PATENT-CLASS-250-209	.....	c07	N69-39980	US-PATENT-CLASS-250-295	.....	c35	N74-34857
US-PATENT-CLASS-250-209	.....	c20	N71-16340	US-PATENT-CLASS-250-298	.....	c35	N77-14406
US-PATENT-CLASS-250-209	.....	c10	N72-17173	US-PATENT-CLASS-250-304	.....	c25	N74-26947
US-PATENT-CLASS-250-209	.....	c14	N72-25409	US-PATENT-CLASS-250-307	.....	c25	N80-20334
US-PATENT-CLASS-250-209	.....	c14	N73-16483	US-PATENT-CLASS-250-308	.....	c25	N80-20334
US-PATENT-CLASS-250-209	.....	c14	N73-26432	US-PATENT-CLASS-250-310	.....	c35	N78-10429
US-PATENT-CLASS-250-209	.....	c14	N73-28490	US-PATENT-CLASS-250-310	.....	c33	N80-14332
US-PATENT-CLASS-250-209	.....	c21	N73-30640	US-PATENT-CLASS-250-320	.....	c74	N78-15880
US-PATENT-CLASS-250-209	.....	c44	N81-24520	US-PATENT-CLASS-250-322	.....	c35	N78-15461
US-PATENT-CLASS-250-211J	.....	c09	N72-17152	US-PATENT-CLASS-250-332	.....	c35	N75-19613
US-PATENT-CLASS-250-211J	.....	c09	N73-14214	US-PATENT-CLASS-250-332	.....	c31	N78-25256
US-PATENT-CLASS-250-211J	.....	c35	N74-15090	US-PATENT-CLASS-250-335	.....	c34	N76-18374
US-PATENT-CLASS-250-211K	.....	c74	N77-22951	US-PATENT-CLASS-250-336	.....	c14	N73-28488
US-PATENT-CLASS-250-211K	.....	c44	N80-18552	US-PATENT-CLASS-250-336	.....	c35	N76-15433
US-PATENT-CLASS-250-211R	.....	c36	N75-19652	US-PATENT-CLASS-250-336	.....	c33	N76-27473
US-PATENT-CLASS-250-211R	.....	c35	N75-23910	US-PATENT-CLASS-250-336	.....	c35	N78-13400
US-PATENT-CLASS-250-212	.....	c03	N71-23354	US-PATENT-CLASS-250-338	.....	c35	N74-18088
US-PATENT-CLASS-250-212	.....	c03	N73-20040	US-PATENT-CLASS-250-338	.....	c35	N77-10493
US-PATENT-CLASS-250-212	.....	c09	N73-32109	US-PATENT-CLASS-250-338	.....	c47	N77-10753
US-PATENT-CLASS-250-213VT	.....	c74	N78-18905	US-PATENT-CLASS-250-338	.....	c35	N80-26635
US-PATENT-CLASS-250-214	.....	c14	N73-25462	US-PATENT-CLASS-250-339	.....	c35	N77-10493
US-PATENT-CLASS-250-214	.....	c14	N73-25462	US-PATENT-CLASS-250-339	.....	c47	N77-10753
US-PATENT-CLASS-250-214	.....	c35	N74-15090	US-PATENT-CLASS-250-340	.....	c35	N76-29551
US-PATENT-CLASS-250-214A	.....	c33	N77-14335	US-PATENT-CLASS-250-343	.....	c35	N74-11284
US-PATENT-CLASS-250-214AL	.....	c74	N79-12890	US-PATENT-CLASS-250-343	.....	c25	N74-26947
US-PATENT-CLASS-250-214R	.....	c14	N73-28490	US-PATENT-CLASS-250-343	.....	c45	N75-27585
US-PATENT-CLASS-250-214R	.....	c74	N79-12890	US-PATENT-CLASS-250-343	.....	c74	N76-20958
US-PATENT-CLASS-250-215	.....	c14	N73-16483	US-PATENT-CLASS-250-343	.....	c25	N76-22323
US-PATENT-CLASS-250-216	.....	c74	N79-34011	US-PATENT-CLASS-250-343	.....	c35	N77-14411
US-PATENT-CLASS-250-217	.....	c14	N69-39896	US-PATENT-CLASS-250-343	.....	c35	N78-13400
US-PATENT-CLASS-250-217	.....	c14	N73-16483	US-PATENT-CLASS-250-343	.....	c25	N81-14015
US-PATENT-CLASS-250-217	.....	c36	N74-13205	US-PATENT-CLASS-250-344	.....	c25	N76-22323
US-PATENT-CLASS-250-217F	.....	c14	N73-16484	US-PATENT-CLASS-250-344	.....	c74	N78-17867
US-PATENT-CLASS-250-217R	.....	c14	N73-19419	US-PATENT-CLASS-250-345	.....	c45	N75-27585
US-PATENT-CLASS-250-217SS	.....	c09	N73-14214	US-PATENT-CLASS-250-347	.....	c35	N77-10493
US-PATENT-CLASS-250-217SS	.....	c36	N74-15145	US-PATENT-CLASS-250-347	.....	c47	N77-10753
US-PATENT-CLASS-250-218	.....	c14	N71-22596	US-PATENT-CLASS-250-347	.....	c74	N80-33210
US-PATENT-CLASS-250-218	.....	c14	N71-28994	US-PATENT-CLASS-250-350	.....	c25	N81-25159
US-PATENT-CLASS-250-218	.....	c74	N78-33913	US-PATENT-CLASS-250-351	.....	c35	N75-30502
US-PATENT-CLASS-250-219	.....	c14	N71-28993	US-PATENT-CLASS-250-351	.....	c35	N78-13400
US-PATENT-CLASS-250-219DF	.....	c91	N74-13130	US-PATENT-CLASS-250-352	.....	c31	N79-17029
US-PATENT-CLASS-250-219TH	.....	c26	N73-26751	US-PATENT-CLASS-250-352	.....	c34	N79-20336
US-PATENT-CLASS-250-225	.....	c14	N71-24664	US-PATENT-CLASS-250-352	.....	c35	N80-26635
US-PATENT-CLASS-250-225	.....	c14	N72-27409	US-PATENT-CLASS-250-352	.....	c74	N80-33210
US-PATENT-CLASS-250-226	.....	c14	N72-25409	US-PATENT-CLASS-250-353	.....	c35	N76-29551
US-PATENT-CLASS-250-226	.....	c43	N79-17288	US-PATENT-CLASS-250-353	.....	c35	N80-26635
US-PATENT-CLASS-250-227	.....	c14	N71-22991	US-PATENT-CLASS-250-353	.....	c74	N80-33210
US-PATENT-CLASS-250-227	.....	c14	N71-23240	US-PATENT-CLASS-250-359	.....	c37	N75-26372
US-PATENT-CLASS-250-227	.....	c60	N77-14751	US-PATENT-CLASS-250-360	.....	c35	N74-15091
US-PATENT-CLASS-250-227	.....	c74	N78-33913	US-PATENT-CLASS-250-361	.....	c35	N74-15091
US-PATENT-CLASS-250-229	.....	c08	N73-30135	US-PATENT-CLASS-250-363B	.....	c52	N77-14737
US-PATENT-CLASS-250-231	.....	c14	N73-20475	US-PATENT-CLASS-250-363B	.....	c74	N79-20857
US-PATENT-CLASS-250-231SE	.....	c74	N74-21304	US-PATENT-CLASS-250-368	.....	c74	N81-24900
US-PATENT-CLASS-250-231SE	.....	c44	N80-18552	US-PATENT-CLASS-250-369	.....	c35	N74-15091
US-PATENT-CLASS-250-232	.....	c23	N71-21821	US-PATENT-CLASS-250-370	.....	c35	N74-18088
US-PATENT-CLASS-250-233	.....	c23	N71-16100	US-PATENT-CLASS-250-370	.....	c33	N75-31332
US-PATENT-CLASS-250-234	.....	c03	N73-20040	US-PATENT-CLASS-250-371	.....	c35	N74-18088
US-PATENT-CLASS-250-235	.....	c14	N72-11364	US-PATENT-CLASS-250-372	.....	c19	N74-29410
US-PATENT-CLASS-250-236	.....	c21	N73-30640	US-PATENT-CLASS-250-372	.....	c24	N76-24363
US-PATENT-CLASS-250-237	.....	c14	N69-24331	US-PATENT-CLASS-250-372	.....	c33	N76-27473
US-PATENT-CLASS-250-237G	.....	c74	N79-20856	US-PATENT-CLASS-250-373	.....	c25	N74-26947
US-PATENT-CLASS-250-237R	.....	c08	N73-30135	US-PATENT-CLASS-250-373	.....	c35	N75-30502
US-PATENT-CLASS-250-237R	.....	c19	N74-15089	US-PATENT-CLASS-250-373	.....	c45	N76-17656
US-PATENT-CLASS-250-238	.....	c33	N75-31332	US-PATENT-CLASS-250-374	.....	c35	N74-26949
US-PATENT-CLASS-250-238	.....	c32	N77-28346	US-PATENT-CLASS-250-385	.....	c35	N74-26949
US-PATENT-CLASS-250-239	.....	c08	N73-30135	US-PATENT-CLASS-250-385	.....	c35	N75-27331
US-PATENT-CLASS-250-239	.....	c74	N78-33913	US-PATENT-CLASS-250-385	.....	c35	N76-15433
US-PATENT-CLASS-250-251	.....	c35	N76-15431	US-PATENT-CLASS-250-385	.....	c35	N76-16393
US-PATENT-CLASS-250-253	.....	c43	N79-31706	US-PATENT-CLASS-250-394	.....	c14	N73-30392
US-PATENT-CLASS-250-272	.....	c74	N76-15880	US-PATENT-CLASS-250-394	.....	c19	N74-29410

US-PATENT-CLASS-250-396	.....	c35 N77-14408	US-PATENT-CLASS-251-333	.....	c12 N71-18615
US-PATENT-CLASS-250-398	.....	c35 N78-10429	US-PATENT-CLASS-251-333	.....	c15 N72-20442
US-PATENT-CLASS-250-400	.....	c25 N76-29379	US-PATENT-CLASS-251-333	.....	c37 N75-25185
US-PATENT-CLASS-250-400	.....	c25 N78-27226	US-PATENT-CLASS-251-339	.....	c37 N81-17433
US-PATENT-CLASS-250-416TV	.....	c35 N78-15461	US-PATENT-CLASS-251-342	.....	c12 N71-18615
US-PATENT-CLASS-250-423	.....	c35 N76-15431	US-PATENT-CLASS-251-358	.....	c15 N71-17648
US-PATENT-CLASS-250-423	.....	c35 N76-16393	US-PATENT-CLASS-251-360	.....	c15 N72-25451
US-PATENT-CLASS-250-423P	.....	c36 N77-26477	US-PATENT-CLASS-252-8.1	.....	c18 N73-26572
US-PATENT-CLASS-250-423P	.....	c25 N78-25148	US-PATENT-CLASS-252-8.1	.....	c27 N74-27037
US-PATENT-CLASS-250-423P	.....	c72 N80-14677	US-PATENT-CLASS-252-8.1	.....	c24 N78-14096
US-PATENT-CLASS-250-427	.....	c72 N80-27163	US-PATENT-CLASS-252-12	.....	c15 N71-23810
US-PATENT-CLASS-250-429	.....	c25 N76-29379	US-PATENT-CLASS-252-12	.....	c24 N76-22309
US-PATENT-CLASS-250-429	.....	c25 N78-27226	US-PATENT-CLASS-252-12.2	.....	c24 N79-17916
US-PATENT-CLASS-250-432	.....	c45 N75-27585	US-PATENT-CLASS-252-26	.....	c15 N71-21403
US-PATENT-CLASS-250-432R	.....	c25 N76-22323	US-PATENT-CLASS-252-26	.....	c15 N71-24046
US-PATENT-CLASS-250-444	.....	c52 N77-14737	US-PATENT-CLASS-252-58	.....	c18 N70-39897
US-PATENT-CLASS-250-457	.....	c35 N80-28686	US-PATENT-CLASS-252-62	.....	c27 N74-27037
US-PATENT-CLASS-250-460	.....	c37 N75-26372	US-PATENT-CLASS-252-62.3	.....	c26 N71-23292
US-PATENT-CLASS-250-475	.....	c35 N79-10389	US-PATENT-CLASS-252-62.3	.....	c76 N76-25049
US-PATENT-CLASS-250-483	.....	c74 N79-20857	US-PATENT-CLASS-252-62.3E	.....	c44 N80-24741
US-PATENT-CLASS-250-483	.....	c74 N81-24900	US-PATENT-CLASS-252-62.3E	.....	c44 N81-19558
US-PATENT-CLASS-250-489	.....	c35 N76-15433	US-PATENT-CLASS-252-62.3GA	.....	c25 N75-26043
US-PATENT-CLASS-250-491	.....	c35 N80-28686	US-PATENT-CLASS-252-70	.....	c23 N75-14834
US-PATENT-CLASS-250-492	.....	c35 N74-15C91	US-PATENT-CLASS-252-300	.....	c14 N72-22443
US-PATENT-CLASS-250-492	.....	c37 N75-26372	US-PATENT-CLASS-252-300	.....	c24 N76-24363
US-PATENT-CLASS-250-492A	.....	c33 N80-14332	US-PATENT-CLASS-252-301.1R	.....	c35 N79-10389
US-PATENT-CLASS-250-492B	.....	c25 N78-27226	US-PATENT-CLASS-252-301.2	.....	c18 N71-27170
US-PATENT-CLASS-250-492R	.....	c25 N76-29379	US-PATENT-CLASS-252-301.4	.....	c06 N73-30097
US-PATENT-CLASS-250-492R	.....	c28 N78-24365	US-PATENT-CLASS-252-301.16	.....	c35 N79-10389
US-PATENT-CLASS-250-493	.....	c73 N75-30676	US-PATENT-CLASS-252-305	.....	c06 N73-30097
US-PATENT-CLASS-250-495	.....	c74 N75-12732	US-PATENT-CLASS-252-359A	.....	c37 N77-13418
US-PATENT-CLASS-250-496	.....	c73 N75-30676	US-PATENT-CLASS-252-364	.....	c28 N81-15119
US-PATENT-CLASS-250-498	.....	c52 N77-14737	US-PATENT-CLASS-252-373	.....	c44 N76-29704
US-PATENT-CLASS-250-499	.....	c73 N74-26767	US-PATENT-CLASS-252-373	.....	c44 N77-10636
US-PATENT-CLASS-250-499	.....	c72 N76-15860	US-PATENT-CLASS-252-408	.....	c14 N73-14428
US-PATENT-CLASS-250-499	c37 N78-13436	US-PATENT-CLASS-252-431N	c06 N73-32029
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US-PATENT-CLASS-250-505	c74 N74-27866	US-PATENT-CLASS-252-472	c25 N78-10225
US-PATENT-CLASS-250-505	c35 N75-19616	US-PATENT-CLASS-252-514	c05 N72-25120
US-PATENT-CLASS-250-508	.....	c35 N75-19616	US-PATENT-CLASS-252-514	.....	c44 N79-31752
US-PATENT-CLASS-250-510	.....	c35 N75-19616	US-PATENT-CLASS-252-518	.....	c24 N79-14156
US-PATENT-CLASS-250-511	.....	c74 N74-27866	US-PATENT-CLASS-252-549	.....	c23 N75-14834
US-PATENT-CLASS-250-513	.....	c35 N80-28686	US-PATENT-CLASS-253	.....	c25 N79-28253
US-PATENT-CLASS-250-518	.....	c14 N73-30392	US-PATENT-CLASS-253-39.1	.....	c33 N71-29152
US-PATENT-CLASS-250-527	.....	c37 N76-18458	US-PATENT-CLASS-253-39.15	.....	c15 N70-33226
US-PATENT-CLASS-250-527	.....	c25 N77-32255	US-PATENT-CLASS-253-39.15	.....	c15 N70-33264
US-PATENT-CLASS-250-527	.....	c44 N77-32580	US-PATENT-CLASS-253-66	.....	c28 N70-33372
US-PATENT-CLASS-250-527	.....	c44 N79-11470	US-PATENT-CLASS-253-66	.....	c15 N70-36412
US-PATENT-CLASS-250-528	.....	c25 N78-25148	US-PATENT-CLASS-253-77	.....	c28 N70-39895
US-PATENT-CLASS-250-531	.....	c25 N78-25148	US-PATENT-CLASS-253-77	.....	c28 N71-28928
US-PATENT-CLASS-250-531	.....	c33 N79-15245	US-PATENT-CLASS-253-317	.....	c28 N71-29154
US-PATENT-CLASS-250-540	.....	c33 N79-15245	US-PATENT-CLASS-254-29A	.....	c44 N77-22606
US-PATENT-CLASS-250-541	.....	c33 N79-15245	US-PATENT-CLASS-254-93B	.....	c15 N73-30457
US-PATENT-CLASS-250-551	.....	c74 N79-34011	US-PATENT-CLASS-254-93B	.....	c35 N74-13129
US-PATENT-CLASS-250-563	.....	c38 N78-17396	US-PATENT-CLASS-254-124	.....	c20 N76-22296
US-PATENT-CLASS-250-566	.....	c74 N75-25706	US-PATENT-CLASS-254-150	.....	c20 N76-22296
US-PATENT-CLASS-250-571	.....	c36 N78-14380	US-PATENT-CLASS-254-156	.....	c15 N71-24599
US-PATENT-CLASS-250-572	.....	c38 N78-17395	US-PATENT-CLASS-254-158	.....	c15 N73-25512
US-PATENT-CLASS-250-572	.....	c38 N76-17396	US-PATENT-CLASS-254-173	.....	c54 N77-21844
US-PATENT-CLASS-250-573	.....	c74 N76-20958	US-PATENT-CLASS-254-186	.....	c15 N71-24599
US-PATENT-CLASS-250-574	.....	c45 N76-21742	US-PATENT-CLASS-254-190	.....	c15 N71-24599
US-PATENT-CLASS-250-574	.....	c36 N77-25501	US-PATENT-CLASS-256-1	.....	c15 N72-25453
US-PATENT-CLASS-250-576	.....	c35 N74-27860	US-PATENT-CLASS-256-13.1	.....	c37 N79-10420
US-PATENT-CLASS-250-578	.....	c36 N75-19652	US-PATENT-CLASS-259-DIG.18	.....	c37 N79-10420
US-PATENT-CLASS-251-7	.....	c37 N79-28550	US-PATENT-CLASS-259-4	.....	c35 N74-15093
US-PATENT-CLASS-251-11	.....	c15 N70-35407	US-PATENT-CLASS-259-4AC	.....	c15 N73-19458
US-PATENT-CLASS-251-31	.....	c15 N71-15485	US-PATENT-CLASS-259-60	.....	c37 N76-19436
US-PATENT-CLASS-251-61	.....	c15 N71-10778	US-PATENT-CLASS-259-71	.....	c35 N74-15093
US-PATENT-CLASS-251-61.1	.....	c12 N71-18615	US-PATENT-CLASS-259-72	.....	c15 N71-21177
US-PATENT-CLASS-251-86	.....	c15 N72-31483	US-PATENT-CLASS-259-98	.....	c37 N74-18123
US-PATENT-CLASS-251-86	.....	c37 N80-23654	US-PATENT-CLASS-259/4R	.....	c35 N74-15126
US-PATENT-CLASS-251-118	.....	c15 N71-18580	US-PATENT-CLASS-260.46.5B	.....	c34 N77-24423
US-PATENT-CLASS-251-120	.....	c37 N74-21065	US-PATENT-CLASS-260-DIG.15	.....	c27 N74-21156
US-PATENT-CLASS-251-121	.....	c15 N71-18580	US-PATENT-CLASS-260-DIG.24	.....	c27 N78-14164
US-PATENT-CLASS-251-122	.....	c15 N73-13462	US-PATENT-CLASS-260-DIG.24	.....	c27 N74-27037
US-PATENT-CLASS-251-122	.....	c37 N74-21065	US-PATENT-CLASS-260-DIG.29	.....	c27 N76-24405
US-PATENT-CLASS-251-127	.....	c12 N71-18615	US-PATENT-CLASS-260-2	.....	c27 N80-24438
US-PATENT-CLASS-251-129	.....	c15 N72-20442	US-PATENT-CLASS-260-2	.....	c06 N71-11243
US-PATENT-CLASS-251-138	.....	c37 N80-23654	US-PATENT-CLASS-260-2	.....	c06 N71-20717
US-PATENT-CLASS-251-148	.....	c15 N71-23024	US-PATENT-CLASS-260-2	.....	c06 N71-20905
US-PATENT-CLASS-251-149.6	.....	c37 N76-14463	US-PATENT-CLASS-260-2	.....	c06 N71-27363
US-PATENT-CLASS-251-149.9	.....	c37 N79-11402	US-PATENT-CLASS-260-2.1	.....	c06 N73-30102
US-PATENT-CLASS-251-172	.....	c15 N71-21234	US-PATENT-CLASS-260-2.1E	.....	c27 N79-21190
US-PATENT-CLASS-251-172	.....	c37 N79-33469	US-PATENT-CLASS-260-2.1E	.....	c25 N81-17187
US-PATENT-CLASS-251-173	.....	c15 N70-33376	US-PATENT-CLASS-260-2.1E	.....	c18 N72-22567
US-PATENT-CLASS-251-210	.....	c37 N74-21065	US-PATENT-CLASS-260-2.2R	.....	c27 N81-14076
US-PATENT-CLASS-251-216	.....	c37 N81-17433	US-PATENT-CLASS-260-2.2R	.....	c25 N81-19244
US-PATENT-CLASS-251-331	.....	c15 N72-31483	US-PATENT-CLASS-260-2.2R	.....	c25 N81-17187
US-PATENT-CLASS-251-333	.....	c15 N70-34659			c25 N81-19244

US-PATENT-CLASS-260-2.5	.....	C06 N71-11242	US-PATENT-CLASS-260-63R	.....	c27 N78-32261
US-PATENT-CLASS-260-2.5	.....	C06 N71-24739	US-PATENT-CLASS-260-65	.....	C06 N73-27980
US-PATENT-CLASS-260-2.5	.....	C06 N71-25929	US-PATENT-CLASS-260-65	.....	C27 N78-32261
US-PATENT-CLASS-260-2.5	.....	C18 N71-26155	US-PATENT-CLASS-260-67	.....	C27 N78-17214
US-PATENT-CLASS-260-2.5	.....	C06 N72-25150	US-PATENT-CLASS-260-67	.....	C27 N79-21191
US-PATENT-CLASS-260-2.5A	.....	C27 N77-31308	US-PATENT-CLASS-260-72.5	.....	C06 N71-11236
US-PATENT-CLASS-260-2.5AK	.....	C27 N76-15310	US-PATENT-CLASS-260-72.5	.....	C06 N71-11239
US-PATENT-CLASS-260-2.5AK	.....	C24 N78-24290	US-PATENT-CLASS-260-72.5	.....	C06 N71-24740
US-PATENT-CLASS-260-2.5AM	.....	C27 N74-12812	US-PATENT-CLASS-260-75NH	.....	C27 N78-17213
US-PATENT-CLASS-260-2.5AM	.....	C27 N77-31308	US-PATENT-CLASS-260-75NH	.....	C27 N78-17213
US-PATENT-CLASS-260-2.5AP	.....	C24 N78-24290	US-PATENT-CLASS-260-75NT	.....	C27 N78-17213
US-PATENT-CLASS-260-2.5AY	.....	C27 N77-31308	US-PATENT-CLASS-260-77.5	.....	C06 N73-30099
US-PATENT-CLASS-260-2.5B	.....	C24 N78-24290	US-PATENT-CLASS-260-77.5	.....	C06 N73-30100
US-PATENT-CLASS-260-2.5BE	.....	C24 N78-24290	US-PATENT-CLASS-260-77.5	.....	C06 N73-30103
US-PATENT-CLASS-260-2.5EP	.....	C24 N78-24290	US-PATENT-CLASS-260-77.5AM	.....	C27 N78-17213
US-PATENT-CLASS-260-2.5F	.....	C18 N73-13562	US-PATENT-CLASS-260-77.5AM	.....	C27 N78-17213
US-PATENT-CLASS-260-2.5FP	.....	C06 N72-25147	US-PATENT-CLASS-260-77.5AP	.....	C06 N72-27144
US-PATENT-CLASS-260-2.5FP	.....	C27 N74-27037	US-PATENT-CLASS-260-77.5AP	.....	C06 N73-33076
US-PATENT-CLASS-260-2.5FP	.....	C24 N78-24290	US-PATENT-CLASS-260-77.5AP	.....	C27 N77-31308
US-PATENT-CLASS-260-2.5L	.....	C27 N74-12814	US-PATENT-CLASS-260-77.5AP	.....	C27 N78-17213
US-PATENT-CLASS-260-2.5N	.....	C24 N78-15180	US-PATENT-CLASS-260-77.5AT	.....	C27 N78-17213
US-PATENT-CLASS-260-2.5N	.....	C27 N78-31232	US-PATENT-CLASS-260-77.55P	.....	C27 N78-17213
US-PATENT-CLASS-260-2.5R	.....	C27 N74-27037	US-PATENT-CLASS-260-78	.....	C06 N71-11235
US-PATENT-CLASS-260-2.5R	.....	C24 N78-15180	US-PATENT-CLASS-260-78	.....	C06 N71-11238
US-PATENT-CLASS-260-2F	.....	C27 N78-32256	US-PATENT-CLASS-260-78.41	.....	C27 N78-31232
US-PATENT-CLASS-260-2R	.....	C37 N74-18126	US-PATENT-CLASS-260-78TF	.....	C06 N73-27980
US-PATENT-CLASS-260-2R	.....	C27 N74-27037	US-PATENT-CLASS-260-78TF	.....	C27 N73-32125
US-PATENT-CLASS-260-2R	.....	C27 N78-15276	US-PATENT-CLASS-260-78TF	.....	C23 N75-30256
US-PATENT-CLASS-260-17.2	.....	C24 N80-26388	US-PATENT-CLASS-260-78TF	.....	C23 N76-15268
US-PATENT-CLASS-260-17.2	.....	C24 N81-13999	US-PATENT-CLASS-260-78TF	.....	C27 N78-32261
US-PATENT-CLASS-260-17.4OC	.....	C23 N81-29160	US-PATENT-CLASS-260-78UA	.....	C06 N73-27980
US-PATENT-CLASS-260-17A	.....	C27 N81-14076	US-PATENT-CLASS-260-85.5	.....	C06 N71-23500
US-PATENT-CLASS-260-18S	.....	C06 N72-25151	US-PATENT-CLASS-260-92.1	.....	C06 N72-25150
US-PATENT-CLASS-260-28.5	.....	C27 N78-33228	US-PATENT-CLASS-260-92.1	.....	C06 N72-25152
US-PATENT-CLASS-260-29.1R	.....	C24 N78-24290	US-PATENT-CLASS-260-92.1	.....	C27 N76-16228
US-PATENT-CLASS-260-29.6	.....	C26 N75-27125	US-PATENT-CLASS-260-92.1	.....	C27 N76-24405
US-PATENT-CLASS-260-29.6RB	.....	C25 N81-19242	US-PATENT-CLASS-260-93.5A	.....	C06 N73-32029
US-PATENT-CLASS-260-29.6S	.....	C27 N74-17283	US-PATENT-CLASS-260-93.5S	.....	C06 N73-32029
US-PATENT-CLASS-260-30.2	.....	C06 N73-27980	US-PATENT-CLASS-260-94.2H	.....	C06 N73-32029
US-PATENT-CLASS-260-30.4H	.....	C27 N78-17205	US-PATENT-CLASS-260-94.2R	.....	C06 N73-32029
US-PATENT-CLASS-260-30.8DS	.....	C06 N73-27580	US-PATENT-CLASS-260-94.7R	.....	C06 N73-32029
US-PATENT-CLASS-260-32.2R	.....	C27 N78-17205	US-PATENT-CLASS-260-94.8	.....	C27 N73-22710
US-PATENT-CLASS-260-32.6N	.....	C06 N73-27580	US-PATENT-CLASS-260-96D	.....	C28 N81-15119
US-PATENT-CLASS-260-32.6N	.....	C23 N76-15268	US-PATENT-CLASS-260-211.5	.....	C06 N72-25149
US-PATENT-CLASS-260-32.6NT	.....	C27 N78-17205	US-PATENT-CLASS-260-240G	.....	C27 N76-32315
US-PATENT-CLASS-260-32.8N	.....	C23 N76-15268	US-PATENT-CLASS-260-307G	.....	C27 N79-22300
US-PATENT-CLASS-260-33.4R	.....	C06 N73-27980	US-PATENT-CLASS-260-326N	.....	C27 N81-17260
US-PATENT-CLASS-260-33.4R	.....	C27 N78-17205	US-PATENT-CLASS-260-326S	.....	C27 N81-17260
US-PATENT-CLASS-260-33.4R	.....	C27 N81-19296	US-PATENT-CLASS-260-346.3	.....	C23 N75-30256
US-PATENT-CLASS-260-33.6EP	.....	C24 N78-27180	US-PATENT-CLASS-260-346.3	.....	C23 N76-15268
US-PATENT-CLASS-260-33.6PQ	.....	C24 N78-27180	US-PATENT-CLASS-260-346.3	.....	C27 N80-32515
US-PATENT-CLASS-260-33.6R	.....	C06 N73-27980	US-PATENT-CLASS-260-348SC	.....	C06 N72-25148
US-PATENT-CLASS-260-33.6UB	.....	C27 N81-15104	US-PATENT-CLASS-260-396N	.....	C27 N74-27037
US-PATENT-CLASS-260-33.8EF	.....	C24 N78-27180	US-PATENT-CLASS-260-404.5	.....	C18 N71-15688
US-PATENT-CLASS-260-33.8P	.....	C27 N76-24405	US-PATENT-CLASS-260-429	.....	C06 N71-28808
US-PATENT-CLASS-260-33.8P	.....	C25 N81-14016	US-PATENT-CLASS-260-448.2	.....	C06 N71-23230
US-PATENT-CLASS-260-33.8UA	.....	C24 N78-27180	US-PATENT-CLASS-260-448.2D	.....	C06 N72-25151
US-PATENT-CLASS-260-37	.....	C18 N71-25881	US-PATENT-CLASS-260-448.2D	.....	C06 N73-32030
US-PATENT-CLASS-260-37	.....	C27 N81-24258	US-PATENT-CLASS-260-448.2H	.....	C37 N74-21058
US-PATENT-CLASS-260-37EP	.....	C24 N78-24290	US-PATENT-CLASS-260-465.5R	.....	C27 N81-24256
US-PATENT-CLASS-260-37EP	.....	C24 N78-27180	US-PATENT-CLASS-260-485F	.....	C06 N73-30098
US-PATENT-CLASS-260-37EP	.....	C15 N79-26100	US-PATENT-CLASS-260-520	.....	C23 N75-30256
US-PATENT-CLASS-260-37EP	.....	C27 N81-17260	US-PATENT-CLASS-260-535H	.....	C06 N72-27144
US-PATENT-CLASS-260-37N	.....	C27 N79-28307	US-PATENT-CLASS-260-544F	.....	C06 N72-20121
US-PATENT-CLASS-260-42	.....	C27 N79-28307	US-PATENT-CLASS-260-551P	.....	C27 N78-32256
US-PATENT-CLASS-260-42.17	.....	C27 N78-17215	US-PATENT-CLASS-260-566B	.....	C27 N76-32315
US-PATENT-CLASS-260-42.43	.....	C24 N78-27180	US-PATENT-CLASS-260-567.6H	.....	C06 N73-32029
US-PATENT-CLASS-260-45.7	.....	C27 N76-24405	US-PATENT-CLASS-260-571	.....	C23 N76-15268
US-PATENT-CLASS-260-45.7R	.....	C24 N78-27180	US-PATENT-CLASS-260-606-5P	.....	C27 N78-32256
US-PATENT-CLASS-260-45.9R	.....	C24 N78-27180	US-PATENT-CLASS-260-615	.....	C06 N71-27254
US-PATENT-CLASS-260-45.75W	.....	C24 N78-27180	US-PATENT-CLASS-260-615	.....	C06 N73-30101
US-PATENT-CLASS-260-45.85N	.....	C24 N78-27180	US-PATENT-CLASS-260-830S	.....	C15 N79-26100
US-PATENT-CLASS-260-46.5	.....	C06 N71-11237	US-PATENT-CLASS-260-858	.....	C27 N81-14076
US-PATENT-CLASS-260-46.5	.....	C06 N71-11240	US-PATENT-CLASS-260-877	.....	C06 N72-22107
US-PATENT-CLASS-260-46.5E	.....	C06 N72-25151	US-PATENT-CLASS-260-879	.....	C27 N76-16228
US-PATENT-CLASS-260-46.5G	.....	C06 N72-25151	US-PATENT-CLASS-260-886	.....	C27 N81-14076
US-PATENT-CLASS-260-46.5P	.....	C06 N72-25151	US-PATENT-CLASS-260-895	.....	C27 N81-14076
US-PATENT-CLASS-260-46.5R	.....	C06 N73-26100	US-PATENT-CLASS-260-898	.....	C27 N81-14076
US-PATENT-CLASS-260-47	.....	C06 N71-28620	US-PATENT-CLASS-260-900	.....	C27 N76-16228
US-PATENT-CLASS-260-47	.....	C06 N71-28807	US-PATENT-CLASS-260-901	.....	C27 N81-14076
US-PATENT-CLASS-260-47CP	.....	C06 N73-27580	US-PATENT-CLASS-260-926	.....	C27 N80-10358
US-PATENT-CLASS-260-47CP	.....	C23 N76-15268	US-PATENT-CLASS-260-959	.....	C27 N78-32256
US-PATENT-CLASS-260-47CP	.....	C27 N78-31232	US-PATENT-CLASS-260-8900	.....	C27 N81-14076
US-PATENT-CLASS-260-47CP	.....	C27 N78-32261	US-PATENT-CLASS-261-DTG.75	.....	C34 N77-24423
US-PATENT-CLASS-260-47OP	.....	C06 N73-32029	US-PATENT-CLASS-261-28	.....	C07 N81-29129
US-PATENT-CLASS-260-49	.....	C27 N78-32261	US-PATENT-CLASS-261-79A	.....	C54 N81-24724
US-PATENT-CLASS-260-53	.....	C27 N79-28307	US-PATENT-CLASS-261-118	.....	C31 N80-18231
US-PATENT-CLASS-260-63N	.....	C27 N78-31232	US-PATENT-CLASS-261-123	.....	C34 N77-24423
US-PATENT-CLASS-260-63N	.....	C27 N78-32261	US-PATENT-CLASS-261-145	.....	C28 N72-22772

US-PATENT-CLASS-263-48	c15 N69-27483	US-PATENT-CLASS-264-510	c44 N79-24432
US-PATENT-CLASS-264-DIG.36	c18 N73-14584	US-PATENT-CLASS-264-516	c44 N79-24432
US-PATENT-CLASS-264-DIG.44	c15 N72-16329	US-PATENT-CLASS-266-19	c15 N70-33382
US-PATENT-CLASS-264-1	c44 N79-24432	US-PATENT-CLASS-266-24	c17 N72-28535
US-PATENT-CLASS-264-3	c28 N71-26779	US-PATENT-CLASS-266-119	c26 N80-28492
US-PATENT-CLASS-264-3R	c28 N77-10213	US-PATENT-CLASS-266-249	c26 N80-28492
US-PATENT-CLASS-264-3R	c20 N77-17143	US-PATENT-CLASS-266-274	c26 N80-28492
US-PATENT-CLASS-264-5	c31 N81-33319	US-PATENT-CLASS-267-1	c15 N69-27504
US-PATENT-CLASS-264-9	c31 N81-33319	US-PATENT-CLASS-267-1	c15 N70-38225
US-PATENT-CLASS-264-22	c15 N72-20446	US-PATENT-CLASS-267-64	c15 N71-21530
US-PATENT-CLASS-264-22	c14 N72-22439	US-PATENT-CLASS-267-166	c34 N74-18552
US-PATENT-CLASS-264-22	c25 N75-12087	US-PATENT-CLASS-269-21	c37 N76-21554
US-PATENT-CLASS-264-22	c27 N80-32516	US-PATENT-CLASS-269-21	c37 N78-17383
US-PATENT-CLASS-264-23	c71 N78-10E37	US-PATENT-CLASS-269-21	c37 N78-27423
US-PATENT-CLASS-264-23	c31 N81-15154	US-PATENT-CLASS-269-21	c76 N80-18951
US-PATENT-CLASS-264-24	c31 N81-33319	US-PATENT-CLASS-269-21	c37 N81-33482
US-PATENT-CLASS-264-27	c26 N71-17818	US-PATENT-CLASS-269-48.1	c39 N74-13131
US-PATENT-CLASS-264-28	c15 N73-12489	US-PATENT-CLASS-269-153	c44 N79-19447
US-PATENT-CLASS-264-33	c44 N75-24432	US-PATENT-CLASS-269-156	c37 N80-14398
US-PATENT-CLASS-264-34	c44 N79-24432	US-PATENT-CLASS-269-266	c37 N78-27423
US-PATENT-CLASS-264-35	c44 N79-24432	US-PATENT-CLASS-269-287	c37 N80-23655
US-PATENT-CLASS-264-36	c15 N73-12489	US-PATENT-CLASS-272-DIG.1	c05 N73-32014
US-PATENT-CLASS-264-36	c32 N74-27612	US-PATENT-CLASS-272-DIG.4	c05 N73-32014
US-PATENT-CLASS-264-40	c15 N73-12489	US-PATENT-CLASS-272-DIG.5	c05 N73-32014
US-PATENT-CLASS-264-40.4	c35 N80-18357	US-PATENT-CLASS-272-1E	c09 N75-15662
US-PATENT-CLASS-264-41	c25 N81-19244	US-PATENT-CLASS-272-57A	c09 N75-15662
US-PATENT-CLASS-264-60	c27 N76-22376	US-PATENT-CLASS-272-70	c05 N71-28619
US-PATENT-CLASS-264-60	c27 N79-14213	US-PATENT-CLASS-272-73	c14 N73-27377
US-PATENT-CLASS-264-63	c27 N76-22376	US-PATENT-CLASS-272-73	c05 N73-27941
US-PATENT-CLASS-264-65	c18 N73-14584	US-PATENT-CLASS-272-73	c37 N74-18127
US-PATENT-CLASS-264-66	c27 N76-22376	US-PATENT-CLASS-272-79C	c05 N73-32014
US-PATENT-CLASS-264-70	c44 N79-24432	US-PATENT-CLASS-272-80	c37 N74-18127
US-PATENT-CLASS-264-71	c44 N79-24432	US-PATENT-CLASS-273-1E	c05 N73-13114
US-PATENT-CLASS-264-90	c24 N78-17150	US-PATENT-CLASS-274-4R	c09 N72-11224
US-PATENT-CLASS-264-92	c15 N71-17603	US-PATENT-CLASS-277-4	c37 N76-22541
US-PATENT-CLASS-264-92	c15 N72-24522	US-PATENT-CLASS-277-13	c15 N71-26294
US-PATENT-CLASS-264-102	c15 N71-10672	US-PATENT-CLASS-277-25	c15 N69-21362
US-PATENT-CLASS-264-102	c15 N73-12489	US-PATENT-CLASS-277-25	c15 N71-19570
US-PATENT-CLASS-264-102	c31 N74-14133	US-PATENT-CLASS-277-25	c15 N72-29488
US-PATENT-CLASS-264-102	c31 N74-18124	US-PATENT-CLASS-277-25	c37 N74-10474
US-PATENT-CLASS-264-102	c37 N76-24575	US-PATENT-CLASS-277-25	c07 N78-25090
US-PATENT-CLASS-264-102	c15 N79-26100	US-PATENT-CLASS-277-27	c15 N72-29488
US-PATENT-CLASS-264-104	c05 N72-25120	US-PATENT-CLASS-277-27	c37 N74-10474
US-PATENT-CLASS-264-104	c27 N81-24257	US-PATENT-CLASS-277-27	c37 N74-15125
US-PATENT-CLASS-264-104	c23 N81-29160	US-PATENT-CLASS-277-27	c37 N75-21631
US-PATENT-CLASS-264-105	c27 N81-24257	US-PATENT-CLASS-277-40	c37 N75-21631
US-PATENT-CLASS-264-111	c17 N71-29137	US-PATENT-CLASS-277-41	c37 N76-22541
US-PATENT-CLASS-264-118	c24 N80-26388	US-PATENT-CLASS-277-62	c37 N79-22475
US-PATENT-CLASS-264-119	c24 N80-26388	US-PATENT-CLASS-277-74	c15 N72-29488
US-PATENT-CLASS-264-124	c24 N80-26388	US-PATENT-CLASS-277-74	c37 N76-22541
US-PATENT-CLASS-264-129	c37 N76-31524	US-PATENT-CLASS-277-91	c37 N74-15125
US-PATENT-CLASS-264-130	c27 N78-32262	US-PATENT-CLASS-277-93R	c37 N76-22541
US-PATENT-CLASS-264-135	c37 N74-18126	US-PATENT-CLASS-277-96	c37 N74-10474
US-PATENT-CLASS-264-136	c37 N74-18126	US-PATENT-CLASS-277-96	c37 N81-24442
US-PATENT-CLASS-264-137	c27 N79-33316	US-PATENT-CLASS-277-96.1	c37 N79-22475
US-PATENT-CLASS-264-137	c27 N81-14078	US-PATENT-CLASS-277-134	c37 N75-21631
US-PATENT-CLASS-264-137	c27 N81-29229	US-PATENT-CLASS-277-134	c07 N78-25090
US-PATENT-CLASS-264-145	c15 N79-26100	US-PATENT-CLASS-277-153	c37 N80-28711
US-PATENT-CLASS-264-151	c15 N79-26100	US-PATENT-CLASS-277-153	c37 N81-26447
US-PATENT-CLASS-264-157	c24 N78-17150	US-PATENT-CLASS-277-181	c37 N81-15363
US-PATENT-CLASS-264-161	c37 N76-31524	US-PATENT-CLASS-277-192	c37 N79-22474
US-PATENT-CLASS-264-175	c15 N79-26100	US-PATENT-CLASS-277-193	c37 N80-28711
US-PATENT-CLASS-264-184	c27 N78-32262	US-PATENT-CLASS-277-193	c37 N81-26447
US-PATENT-CLASS-264-211	c27 N78-32262	US-PATENT-CLASS-277-224	c37 N80-28711
US-PATENT-CLASS-264-212	c27 N80-32516	US-PATENT-CLASS-277-229	c37 N81-15363
US-PATENT-CLASS-264-217	c25 N75-12C87	US-PATENT-CLASS-279-1B	c37 N75-33395
US-PATENT-CLASS-264-219	c37 N76-31524	US-PATENT-CLASS-279-3	c37 N78-17383
US-PATENT-CLASS-264-221	c15 N72-16329	US-PATENT-CLASS-279-89	c37 N75-33395
US-PATENT-CLASS-264-225	c15 N72-16329	US-PATENT-CLASS-279-107	c37 N75-33395
US-PATENT-CLASS-264-227	c15 N72-16329	US-PATENT-CLASS-280-150SB	c05 N75-25915
US-PATENT-CLASS-264-229	c24 N81-29163	US-PATENT-CLASS-280-432	c37 N77-10477
US-PATENT-CLASS-264-231	c24 N81-29163	US-PATENT-CLASS-285-DIG.21	c15 N72-25450
US-PATENT-CLASS-264-236	c27 N78-32262	US-PATENT-CLASS-285-DIG.21	c33 N73-26958
US-PATENT-CLASS-264-236	c15 N79-26100	US-PATENT-CLASS-285-3	c15 N69-27490
US-PATENT-CLASS-264-257	c37 N74-18126	US-PATENT-CLASS-285-3	c15 N72-25450
US-PATENT-CLASS-264-258	c24 N81-29163	US-PATENT-CLASS-285-18	c15 N72-20445
US-PATENT-CLASS-264-259	c24 N81-29163	US-PATENT-CLASS-285-24	c15 N71-10782
US-PATENT-CLASS-264-267	c37 N76-24575	US-PATENT-CLASS-285-27	c15 N70-41808
US-PATENT-CLASS-264-294	c31 N74-13177	US-PATENT-CLASS-285-33	c15 N72-25450
US-PATENT-CLASS-264-304	c37 N76-31524	US-PATENT-CLASS-285-38	c15 N71-24903
US-PATENT-CLASS-264-305	c37 N76-31524	US-PATENT-CLASS-285-45	c15 N71-28937
US-PATENT-CLASS-264-308	c37 N76-31524	US-PATENT-CLASS-285-114	c37 N75-19686
US-PATENT-CLASS-264-310	c37 N76-31524	US-PATENT-CLASS-285-192	c20 N78-24275
US-PATENT-CLASS-264-311	c24 N81-29163	US-PATENT-CLASS-285-226	c37 N75-19686
US-PATENT-CLASS-264-318	c37 N76-31524	US-PATENT-CLASS-285-226	c37 N76-14460
US-PATENT-CLASS-264-331	c27 N76-16230	US-PATENT-CLASS-285-235	c54 N78-31735
US-PATENT-CLASS-264-332	c37 N81-25371	US-PATENT-CLASS-285-235	c54 N79-24651
US-PATENT-CLASS-264-334	c37 N76-31524	US-PATENT-CLASS-285-265	c37 N76-14460
US-PATENT-CLASS-264-345	c71 N78-10E37	US-PATENT-CLASS-285-314	c15 N71-24903

US-PATENT-CLASS-285-316	c15 N72-25450	US-PATENT-CLASS-307-118	c09 N72-27227
US-PATENT-CLASS-285-316	c33 N73-26958	US-PATENT-CLASS-307-119	c33 N79-28415
US-PATENT-CLASS-285-317	c15 N71-24503	US-PATENT-CLASS-307-126	c14 N71-27407
US-PATENT-CLASS-285-326	c37 N79-11402	US-PATENT-CLASS-307-127	c33 N74-14956
US-PATENT-CLASS-285-331	c15 N70-41629	US-PATENT-CLASS-307-136	c09 N69-27500
US-PATENT-CLASS-285-345	c15 N72-20445	US-PATENT-CLASS-307-141.8	c03 N72-25020
US-PATENT-CLASS-285-359	c37 N79-11402	US-PATENT-CLASS-307-149	c09 N71-13486
US-PATENT-CLASS-285-406	c15 N71-24503	US-PATENT-CLASS-307-149	c54 N75-12616
US-PATENT-CLASS-285-410	c05 N72-11085	US-PATENT-CLASS-307-151	c32 N78-24391
US-PATENT-CLASS-287-54A	c11 N72-25287	US-PATENT-CLASS-307-157	c16 N73-32391
US-PATENT-CLASS-287-85R	c15 N73-12488	US-PATENT-CLASS-307-204	c35 N75-30504
US-PATENT-CLASS-287-92	c31 N73-32749	US-PATENT-CLASS-307-205	c33 N75-14957
US-PATENT-CLASS-287-119	c15 N70-41829	US-PATENT-CLASS-307-206	c10 N72-22236
US-PATENT-CLASS-287-189.36	c15 N71-10799	US-PATENT-CLASS-307-207	c08 N71-29034
US-PATENT-CLASS-287-189.365	c15 N71-26312	US-PATENT-CLASS-307-207	c09 N73-13209
US-PATENT-CLASS-290-40	c03 N71-11057	US-PATENT-CLASS-307-208	c33 N75-14957
US-PATENT-CLASS-290-52	c37 N77-32500	US-PATENT-CLASS-307-211	c35 N75-30504
US-PATENT-CLASS-290-52	c37 N77-32501	US-PATENT-CLASS-307-215	c10 N71-28860
US-PATENT-CLASS-290-53	c44 N80-29834	US-PATENT-CLASS-307-215	c09 N71-29139
US-PATENT-CLASS-292-DIG. 14	c37 N75-19685	US-PATENT-CLASS-307-215	c10 N72-22236
US-PATENT-CLASS-292-108	c37 N75-19685	US-PATENT-CLASS-307-215	c09 N73-13209
US-PATENT-CLASS-292-110	c37 N77-32499	US-PATENT-CLASS-307-215	c33 N74-22814
US-PATENT-CLASS-292-122	c37 N75-19685	US-PATENT-CLASS-307-216	c08 N71-18751
US-PATENT-CLASS-294-1B	c35 N76-16392	US-PATENT-CLASS-307-219	c35 N75-30504
US-PATENT-CLASS-294-15	c15 N71-29133	US-PATENT-CLASS-307-219	c60 N81-15706
US-PATENT-CLASS-294-19R	c35 N76-16392	US-PATENT-CLASS-307-220	c10 N73-26229
US-PATENT-CLASS-294-83	c15 N71-24897	US-PATENT-CLASS-307-221R	c10 N73-20254
US-PATENT-CLASS-294-86.33	c37 N75-33395	US-PATENT-CLASS-307-221R	c33 N76-14373
US-PATENT-CLASS-294-86R	c37 N80-14398	US-PATENT-CLASS-307-222	c09 N69-27463
US-PATENT-CLASS-294-86R	c37 N81-27519	US-PATENT-CLASS-307-222	c08 N71-29034
US-PATENT-CLASS-294-93	c54 N81-26718	US-PATENT-CLASS-307-223	c09 N72-17157
US-PATENT-CLASS-294-106	c37 N81-14320	US-PATENT-CLASS-307-223B	c09 N72-22201
US-PATENT-CLASS-294-113	c37 N80-14398	US-PATENT-CLASS-307-225R	c33 N74-10223
US-PATENT-CLASS-294-116	c37 N75-33395	US-PATENT-CLASS-307-225R	c33 N75-31330
US-PATENT-CLASS-297-68	c05 N71-12343	US-PATENT-CLASS-307-225R	c33 N77-24375
US-PATENT-CLASS-297-68	c05 N72-11085	US-PATENT-CLASS-307-225R	c60 N81-15706
US-PATENT-CLASS-297-216	c05 N70-35152	US-PATENT-CLASS-307-227	c09 N72-17157
US-PATENT-CLASS-297-232	c05 N72-11085	US-PATENT-CLASS-307-227	c33 N75-19522
US-PATENT-CLASS-297-385	c05 N71-12341	US-PATENT-CLASS-307-229	c09 N71-12520
US-PATENT-CLASS-297-385	c05 N75-25915	US-PATENT-CLASS-307-229	c09 N72-23173
US-PATENT-CLASS-297-386	c15 N73-30460	US-PATENT-CLASS-307-229	c33 N75-18479
US-PATENT-CLASS-297-388	c05 N75-25915	US-PATENT-CLASS-307-229	c33 N77-17354
US-PATENT-CLASS-297-389	c05 N75-25915	US-PATENT-CLASS-307-229	c33 N78-32339
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US-PATENT-CLASS-299-13	c43 N81-26509	US-PATENT-CLASS-307-230	c09 N72-21245
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US-PATENT-CLASS-328-155	c17 N76-22245	US-PATENT-CLASS-330-13	c33 N75-30428
US-PATENT-CLASS-328-160	c32 N74-19788	US-PATENT-CLASS-330-14	c09 N70-35440
US-PATENT-CLASS-328-161	c33 N77-17354	US-PATENT-CLASS-330-14	c33 N77-14335
US-PATENT-CLASS-328-163	c33 N79-10338	US-PATENT-CLASS-330-16	c10 N71-33129
US-PATENT-CLASS-328-164	c07 N71-33696	US-PATENT-CLASS-330-18	c09 N72-17155
US-PATENT-CLASS-328-165	c09 N71-24806	US-PATENT-CLASS-330-18	c33 N75-30428
US-PATENT-CLASS-328-165	c07 N71-33696	US-PATENT-CLASS-330-20	c09 N73-20232
US-PATENT-CLASS-328-166	c10 N72-20223	US-PATENT-CLASS-330-22	c09 N71-10798
US-PATENT-CLASS-328-167	c10 N71-22586	US-PATENT-CLASS-330-22	c09 N73-20232
US-PATENT-CLASS-328-167	c08 N71-29034	US-PATENT-CLASS-330-24	c10 N71-33129
US-PATENT-CLASS-328-167	c10 N72-17171	US-PATENT-CLASS-330-24	c33 N75-30429
US-PATENT-CLASS-328-167	c09 N72-21245	US-PATENT-CLASS-330-26	c10 N72-17172
US-PATENT-CLASS-328-167	c09 N73-20231	US-PATENT-CLASS-330-27R	c10 N72-31273
US-PATENT-CLASS-328-167	c08 N73-26175	US-PATENT-CLASS-330-28	c33 N74-21851
US-PATENT-CLASS-328-168	c32 N74-19788	US-PATENT-CLASS-330-28	c33 N77-14335
US-PATENT-CLASS-328-171	c10 N71-24844	US-PATENT-CLASS-330-29	c09 N69-24330
US-PATENT-CLASS-328-172	c32 N74-19788	US-PATENT-CLASS-330-29	c10 N72-28241
US-PATENT-CLASS-328-172	c33 N78-17294	US-PATENT-CLASS-330-30	c09 N71-19466
US-PATENT-CLASS-328-186	c09 N72-17157	US-PATENT-CLASS-330-30	c09 N71-19516
US-PATENT-CLASS-328-187	c10 N73-20254	US-PATENT-CLASS-330-30	c09 N71-27016
US-PATENT-CLASS-328-189	c14 N72-27408	US-PATENT-CLASS-330-30D	c10 N72-20221
US-PATENT-CLASS-328-190	c33 N76-14371	US-PATENT-CLASS-330-30D	c09 N73-20232
US-PATENT-CLASS-328-192	c60 N81-15706	US-PATENT-CLASS-330-31	c10 N71-26331
US-PATENT-CLASS-328-207	c09 N71-28468	US-PATENT-CLASS-330-31	c10 N72-17172
US-PATENT-CLASS-328-207	c10 N71-28660	US-PATENT-CLASS-330-35	c09 N72-17156
US-PATENT-CLASS-328-207	c09 N71-29139	US-PATENT-CLASS-330-35	c09 N73-20232
US-PATENT-CLASS-328-207	c10 N72-20221	US-PATENT-CLASS-330-35	c33 N74-14939
US-PATENT-CLASS-328-233	c10 N71-22962	US-PATENT-CLASS-330-40	c07 N71-28430
US-PATENT-CLASS-328-233	c75 N75-13625	US-PATENT-CLASS-330-40	c09 N72-17155
US-PATENT-CLASS-328-233	c37 N78-17386	US-PATENT-CLASS-330-40	c09 N73-20232
US-PATENT-CLASS-329-50	c33 N74-17930	US-PATENT-CLASS-330-40	c33 N75-30428
US-PATENT-CLASS-329-50	c35 N81-19427	US-PATENT-CLASS-330-43	c33 N79-10339
US-PATENT-CLASS-329-104	c07 N71-11282	US-PATENT-CLASS-330-49	c14 N70-35220
US-PATENT-CLASS-329-104	c33 N74-12687	US-PATENT-CLASS-330-51	c10 N71-28859
US-PATENT-CLASS-329-104	c32 N77-24331	US-PATENT-CLASS-330-51	c33 N79-22373
US-PATENT-CLASS-329-107	c35 N81-19427	US-PATENT-CLASS-330-52	c71 N78-14867
US-PATENT-CLASS-329-119	c33 N77-21314	US-PATENT-CLASS-330-53	c33 N74-32660
US-PATENT-CLASS-329-120	c07 N73-30113	US-PATENT-CLASS-330-59	c09 N72-25250
US-PATENT-CLASS-329-122	c10 N71-19469	US-PATENT-CLASS-330-59	c33 N74-21851
US-PATENT-CLASS-329-122	c07 N73-28612	US-PATENT-CLASS-330-59	c33 N77-14335
US-PATENT-CLASS-329-122	c33 N74-12687	US-PATENT-CLASS-330-61	c09 N71-23097
US-PATENT-CLASS-329-122	c32 N74-20811	US-PATENT-CLASS-330-63	c33 N75-30428
US-PATENT-CLASS-329-122	c33 N77-14334	US-PATENT-CLASS-330-69	c33 N74-32712
US-PATENT-CLASS-329-122	c32 N77-24331	US-PATENT-CLASS-330-69	c33 N75-19518
US-PATENT-CLASS-329-122	c32 N79-14267	US-PATENT-CLASS-330-70CR	c10 N73-27171
US-PATENT-CLASS-329-122	c33 N81-33405	US-PATENT-CLASS-330-70R	c09 N72-21245
US-PATENT-CLASS-329-124	c33 N77-14334	US-PATENT-CLASS-330-80T	c09 N73-20232
US-PATENT-CLASS-329-124	c33 N78-32338	US-PATENT-CLASS-330-85	c09 N72-21245
US-PATENT-CLASS-329-126	c33 N74-12687	US-PATENT-CLASS-330-86	c09 N73-20231
US-PATENT-CLASS-329-140	c07 N71-24583	US-PATENT-CLASS-330-86	c33 N75-19518
US-PATENT-CLASS-329-145	c07 N71-33696	US-PATENT-CLASS-330-86	c33 N79-22373
US-PATENT-CLASS-329-161	c07 N72-20141	US-PATENT-CLASS-330-94	c10 N72-17172
US-PATENT-CLASS-329-162	c07 N72-20141	US-PATENT-CLASS-330-103	c32 N74-22096
US-PATENT-CLASS-329-166	c33 N75-19520	US-PATENT-CLASS-330-107	c10 N72-11256
US-PATENT-CLASS-329-166	c33 N75-25041	US-PATENT-CLASS-330-107	c10 N72-17172
US-PATENT-CLASS-329-204	c33 N75-19520	US-PATENT-CLASS-330-109	c10 N72-11256
US-PATENT-CLASS-329-204	c33 N75-25041	US-PATENT-CLASS-330-109	c10 N72-17171
US-PATENT-CLASS-329-205	c33 N77-21314	US-PATENT-CLASS-330-109	c10 N72-17172
US-PATENT-CLASS-330-2	c09 N69-39586	US-PATENT-CLASS-330-109	c09 N73-20231
US-PATENT-CLASS-330-2	c09 N72-25250	US-PATENT-CLASS-330-124	c07 N71-28430
US-PATENT-CLASS-330-2	c33 N78-10375	US-PATENT-CLASS-330-176	c10 N72-17171
US-PATENT-CLASS-330-2	c33 N79-22373	US-PATENT-CLASS-330-200	c07 N71-28430
US-PATENT-CLASS-330-4	c16 N71-15550	US-PATENT-CLASS-330-207A	c33 N75-30429
US-PATENT-CLASS-330-4	c16 N71-24831	US-PATENT-CLASS-331-DIG.1	c36 N75-30524
US-PATENT-CLASS-330-4	c16 N72-28521	US-PATENT-CLASS-331-DIG.2	c33 N81-33405
US-PATENT-CLASS-330-4	c36 N75-15029	US-PATENT-CLASS-331-1A	c33 N74-10194
US-PATENT-CLASS-330-4	c36 N76-31512	US-PATENT-CLASS-331-1A	c33 N75-25040
US-PATENT-CLASS-330-4	c36 N78-18410	US-PATENT-CLASS-331-1A	c33 N79-11313
US-PATENT-CLASS-330-4	c36 N80-18372	US-PATENT-CLASS-331-3	c35 N76-15436
US-PATENT-CLASS-330-4.3	c16 N73-32391	US-PATENT-CLASS-331-4	c09 N69-21543
US-PATENT-CLASS-330-4.3	c36 N75-19655	US-PATENT-CLASS-331-4	c33 N74-10194
US-PATENT-CLASS-330-4.3	c36 N75-27364	US-PATENT-CLASS-331-4	c33 N78-32338
US-PATENT-CLASS-330-4.3	c36 N75-32441	US-PATENT-CLASS-331-7	c07 N72-11150

US-PATENT-CLASS-331-10	c07 N72-11150	US-PATENT-CLASS-331-107A	c71 N77-26919
US-PATENT-CLASS-331-12	c33 N78-32338	US-PATENT-CLASS-331-107G	c26 N72-25679
US-PATENT-CLASS-331-14	c09 N72-21247	US-PATENT-CLASS-331-107G	c09 N73-15235
US-PATENT-CLASS-331-14	c33 N74-10194	US-PATENT-CLASS-331-108A	c33 N74-20862
US-PATENT-CLASS-331-14	c33 N79-11313	US-PATENT-CLASS-331-109	c10 N71-27271
US-PATENT-CLASS-331-17	c10 N71-20852	US-PATENT-CLASS-331-109	c33 N74-26732
US-PATENT-CLASS-331-17	c10 N73-27171	US-PATENT-CLASS-331-111	c10 N71-23669
US-PATENT-CLASS-331-17	c33 N74-10194	US-PATENT-CLASS-331-111	c09 N72-21247
US-PATENT-CLASS-331-18	c10 N71-26374	US-PATENT-CLASS-331-113	c09 N70-38995
US-PATENT-CLASS-331-18	c33 N74-10194	US-PATENT-CLASS-331-113	c10 N71-19418
US-PATENT-CLASS-331-18	c33 N75-25040	US-PATENT-CLASS-331-113	c09 N71-19470
US-PATENT-CLASS-331-23	c09 N72-21247	US-PATENT-CLASS-331-113	c10 N71-25882
US-PATENT-CLASS-331-23	c33 N77-14334	US-PATENT-CLASS-331-113	c10 N71-25950
US-PATENT-CLASS-331-23	c33 N79-11313	US-PATENT-CLASS-331-113	c09 N71-28810
US-PATENT-CLASS-331-25	c10 N73-27171	US-PATENT-CLASS-331-113A	c09 N72-25253
US-PATENT-CLASS-331-25	c33 N75-25040	US-PATENT-CLASS-331-113A	c09 N72-25254
US-PATENT-CLASS-331-27	c33 N79-11313	US-PATENT-CLASS-331-113A	c33 N74-11049
US-PATENT-CLASS-331-30	c09 N72-21247	US-PATENT-CLASS-331-114	c33 N77-17351
US-PATENT-CLASS-331-34	c07 N72-11150	US-PATENT-CLASS-331-115	c10 N72-33230
US-PATENT-CLASS-331-36C	c33 N77-14334	US-PATENT-CLASS-331-115	c33 N74-20862
US-PATENT-CLASS-331-44	c14 N72-27408	US-PATENT-CLASS-331-116R	c10 N72-33230
US-PATENT-CLASS-331-45	c10 N73-16206	US-PATENT-CLASS-331-116R	c33 N74-20862
US-PATENT-CLASS-331-48	c33 N81-17349	US-PATENT-CLASS-331-117	c10 N71-27271
US-PATENT-CLASS-331-62	c33 N74-11049	US-PATENT-CLASS-331-117	c09 N72-22203
US-PATENT-CLASS-331-64	c33 N78-32338	US-PATENT-CLASS-331-117R	c33 N74-26732
US-PATENT-CLASS-331-65	c35 N75-29380	US-PATENT-CLASS-331-135	c10 N73-32145
US-PATENT-CLASS-331-65	c33 N80-23559	US-PATENT-CLASS-331-159	c33 N74-20862
US-PATENT-CLASS-331-66	c07 N72-11150	US-PATENT-CLASS-331-177	c10 N71-27271
US-PATENT-CLASS-331-78	c09 N71-23598	US-PATENT-CLASS-331-177R	c09 N73-15235
US-PATENT-CLASS-331-78	c08 N73-12175	US-PATENT-CLASS-331-177V	c33 N77-17351
US-PATENT-CLASS-331-78	c33 N75-19515	US-PATENT-CLASS-331-178	c33 N74-10194
US-PATENT-CLASS-331-90	c09 N73-15235	US-PATENT-CLASS-331-183	c33 N74-26732
US-PATENT-CLASS-331-94	c16 N70-41578	US-PATENT-CLASS-332-1	c10 N71-23084
US-PATENT-CLASS-331-94	c16 N72-28521	US-PATENT-CLASS-332-2	c35 N75-19614
US-PATENT-CLASS-331-94	c16 N73-13489	US-PATENT-CLASS-332-7.5	c36 N75-15029
US-PATENT-CLASS-331-94	c35 N76-15436	US-PATENT-CLASS-332-7.5	c36 N78-18410
US-PATENT-CLASS-331-94	c36 N76-31512	US-PATENT-CLASS-332-7.51	c16 N72-25485
US-PATENT-CLASS-331-94	c36 N79-14362	US-PATENT-CLASS-332-7.51	c07 N73-26119
US-PATENT-CLASS-331-94	c36 N80-18372	US-PATENT-CLASS-332-7.51	c33 N74-20859
US-PATENT-CLASS-331-94.5	c16 N71-18614	US-PATENT-CLASS-332-7.51	c36 N76-18427
US-PATENT-CLASS-331-94.5	c16 N71-24832	US-PATENT-CLASS-332-9	c07 N71-12390
US-PATENT-CLASS-331-94.5	c23 N71-26722	US-PATENT-CLASS-332-9R	c08 N71-29138
US-PATENT-CLASS-331-94.5	c15 N71-27135	US-PATENT-CLASS-332-10	c08 N71-29138
US-PATENT-CLASS-331-94.5	c23 N71-29125	US-PATENT-CLASS-332-11D	c35 N74-17885
US-PATENT-CLASS-331-94.5	c16 N71-33410	US-PATENT-CLASS-332-16	c33 N77-21314
US-PATENT-CLASS-331-94.5	c16 N72-12440	US-PATENT-CLASS-332-18	c33 N77-17351
US-PATENT-CLASS-331-94.5	c25 N72-24753	US-PATENT-CLASS-332-19	c10 N71-23544
US-PATENT-CLASS-331-94.5	c16 N72-25485	US-PATENT-CLASS-332-21	c08 N72-25208
US-PATENT-CLASS-331-94.5	c07 N73-26119	US-PATENT-CLASS-332-22	c32 N77-14292
US-PATENT-CLASS-331-94.5	c09 N73-32111	US-PATENT-CLASS-332-22	c33 N81-15192
US-PATENT-CLASS-331-94.5	c16 N73-32391	US-PATENT-CLASS-332-23B	c32 N77-14292
US-PATENT-CLASS-331-94.5	c36 N76-18427	US-PATENT-CLASS-332-23R	c33 N81-15192
US-PATENT-CLASS-331-94.5A	c16 N73-33397	US-PATENT-CLASS-332-29	c07 N71-28429
US-PATENT-CLASS-331-94.5A	c36 N75-27364	US-PATENT-CLASS-332-30	c10 N71-27271
US-PATENT-CLASS-331-94.5C	c36 N75-31427	US-PATENT-CLASS-332-30	c07 N71-28429
US-PATENT-CLASS-331-94.5C	c36 N76-18428	US-PATENT-CLASS-332-30	c33 N77-21314
US-PATENT-CLASS-331-94.5C	c36 N76-24553	US-PATENT-CLASS-332-30V	c33 N77-14334
US-PATENT-CLASS-331-94.5C	c36 N76-29575	US-PATENT-CLASS-332-30V	c33 N77-17351
US-PATENT-CLASS-331-94.5C	c36 N80-14384	US-PATENT-CLASS-332-31	c08 N71-12500
US-PATENT-CLASS-331-94.5D	c33 N74-20859	US-PATENT-CLASS-332-31	c26 N72-21701
US-PATENT-CLASS-331-94.5D	c36 N77-19416	US-PATENT-CLASS-332-47	c33 N75-19520
US-PATENT-CLASS-331-94.5D	c36 N77-25502	US-PATENT-CLASS-332-51W	c07 N72-20141
US-PATENT-CLASS-331-94.5D	c35 N77-27366	US-PATENT-CLASS-332-52	c33 N77-21314
US-PATENT-CLASS-331-94.5G	c36 N75-31426	US-PATENT-CLASS-332-751	c36 N80-16321
US-PATENT-CLASS-331-94.5G	c36 N77-19416	US-PATENT-CLASS-333-6	c07 N71-33606
US-PATENT-CLASS-331-94.5G	c36 N78-17366	US-PATENT-CLASS-333-7	c07 N71-33606
US-PATENT-CLASS-331-94.5G	c36 N78-27402	US-PATENT-CLASS-333-7	c07 N72-25170
US-PATENT-CLASS-331-94.5G	c36 N79-18307	US-PATENT-CLASS-333-8	c07 N69-24334
US-PATENT-CLASS-331-94.5K	c36 N74-15145	US-PATENT-CLASS-333-12	c32 N80-32605
US-PATENT-CLASS-331-94.5L	c72 N79-13826	US-PATENT-CLASS-333-12	c33 N81-27397
US-PATENT-CLASS-331-94.5M	c36 N75-19654	US-PATENT-CLASS-333-14	c32 N74-19788
US-PATENT-CLASS-331-94.5P	c36 N75-19655	US-PATENT-CLASS-333-16	c33 N74-17927
US-PATENT-CLASS-331-94.5P	c36 N75-31426	US-PATENT-CLASS-333-17	c44 N74-19870
US-PATENT-CLASS-331-94.5P	c36 N77-25502	US-PATENT-CLASS-333-17R	c33 N78-32340
US-PATENT-CLASS-331-94.5P	c36 N78-27402	US-PATENT-CLASS-333-18	c33 N74-17927
US-PATENT-CLASS-331-94.5P	c72 N79-13826	US-PATENT-CLASS-333-18	c32 N76-21366
US-PATENT-CLASS-331-94.5P	c36 N79-18307	US-PATENT-CLASS-333-21	c07 N71-10676
US-PATENT-CLASS-331-94.5P	c36 N80-14384	US-PATENT-CLASS-333-21A	c07 N71-33606
US-PATENT-CLASS-331-94.5PE	c36 N75-32441	US-PATENT-CLASS-333-21R	c33 N75-30430
US-PATENT-CLASS-331-94.5PE	c36 N77-19416	US-PATENT-CLASS-333-24R	c09 N72-29172
US-PATENT-CLASS-331-94.5PE	c36 N78-27402	US-PATENT-CLASS-333-24R	c36 N80-18372
US-PATENT-CLASS-331-94.5PE	c72 N79-13826	US-PATENT-CLASS-333-30	c10 N71-25900
US-PATENT-CLASS-331-94.5S	c36 N74-15145	US-PATENT-CLASS-333-70CR	c10 N72-17171
US-PATENT-CLASS-331-94.5S	c36 N77-25499	US-PATENT-CLASS-333-70R	c32 N77-18307
US-PATENT-CLASS-331-94.5T	c35 N77-27366	US-PATENT-CLASS-333-72	c10 N71-25900
US-PATENT-CLASS-331-94.5T	c36 N78-17366	US-PATENT-CLASS-333-72	c71 N77-26919
US-PATENT-CLASS-331-94.5G	c36 N75-32441	US-PATENT-CLASS-333-73	c07 N69-24323
US-PATENT-CLASS-331-107	c09 N71-18721	US-PATENT-CLASS-333-73	c09 N71-23573
US-PATENT-CLASS-331-107	c26 N72-21701	US-PATENT-CLASS-333-73R	c09 N73-26195

US-PATENT-CLASS-333-73S	c09 N73-26195	US-PATENT-CLASS-339-5	c15 N71-23049
US-PATENT-CLASS-333-73W	c07 N72-20141	US-PATENT-CLASS-339-17	c14 N69-27431
US-PATENT-CLASS-333-75	c32 N77-18307	US-PATENT-CLASS-339-17	c15 N71-17685
US-PATENT-CLASS-333-76	c32 N77-18307	US-PATENT-CLASS-339-17	c09 N71-26133
US-PATENT-CLASS-333-79	c10 N70-41964	US-PATENT-CLASS-339-17M	c37 N76-27567
US-PATENT-CLASS-333-79	c09 N72-25256	US-PATENT-CLASS-339-17R	c15 N71-29133
US-PATENT-CLASS-333-80	c09 N71-12517	US-PATENT-CLASS-339-18C	c37 N76-27567
US-PATENT-CLASS-333-80	c09 N72-21245	US-PATENT-CLASS-339-45M	c15 N72-25450
US-PATENT-CLASS-333-80R	c33 N74-32712	US-PATENT-CLASS-339-46	c15 N72-17455
US-PATENT-CLASS-333-80T	c10 N72-33230	US-PATENT-CLASS-339-75MP	c09 N72-28225
US-PATENT-CLASS-333-81	c07 N71-29065	US-PATENT-CLASS-339-91	c09 N69-21927
US-PATENT-CLASS-333-81B	c14 N73-13420	US-PATENT-CLASS-339-91B	c15 N72-25450
US-PATENT-CLASS-333-81R	c07 N72-25170	US-PATENT-CLASS-339-94M	c09 N72-28225
US-PATENT-CLASS-333-81R	c33 N76-32340	US-PATENT-CLASS-339-95	c09 N69-39734
US-PATENT-CLASS-333-81R	c32 N80-14281	US-PATENT-CLASS-339-143C	c33 N76-16332
US-PATENT-CLASS-333-82A	c09 N73-26195	US-PATENT-CLASS-339-143B	c09 N72-25256
US-PATENT-CLASS-333-82B	c32 N77-18307	US-PATENT-CLASS-339-147R	c09 N72-25256
US-PATENT-CLASS-333-83	c09 N71-24841	US-PATENT-CLASS-339-150	c09 N69-21470
US-PATENT-CLASS-333-83BT	c33 N75-30430	US-PATENT-CLASS-339-176	c09 N70-34596
US-PATENT-CLASS-333-83R	c36 N74-11313	US-PATENT-CLASS-339-176	c09 N70-36494
US-PATENT-CLASS-333-84M	c09 N73-26195	US-PATENT-CLASS-339-176M	c15 N72-17455
US-PATENT-CLASS-333-95	c07 N71-27191	US-PATENT-CLASS-339-176MP	c09 N72-28225
US-PATENT-CLASS-333-96	c09 N71-20445	US-PATENT-CLASS-339-177	c09 N71-20851
US-PATENT-CLASS-333-96	c07 N71-27191	US-PATENT-CLASS-339-198R	c33 N76-16332
US-PATENT-CLASS-333-97	c07 N69-27462	US-PATENT-CLASS-339-218M	c09 N72-28225
US-PATENT-CLASS-333-97R	c36 N74-11313	US-PATENT-CLASS-339-242	c33 N76-16332
US-PATENT-CLASS-333-98	c09 N71-23548	US-PATENT-CLASS-339-252R	c52 N77-14738
US-PATENT-CLASS-333-98	c09 N71-24808	US-PATENT-CLASS-339-275R	c33 N76-16332
US-PATENT-CLASS-333-98P	c07 N72-25170	US-PATENT-CLASS-339-275T	c09 N72-20200
US-PATENT-CLASS-333-98P	c09 N72-29172	US-PATENT-CLASS-339-276T	c09 N72-20200
US-PATENT-CLASS-333-98R	c07 N72-25170	US-PATENT-CLASS-339-278M	c15 N72-17455
US-PATENT-CLASS-333-98R	c09 N72-29172	US-PATENT-CLASS-339-12R	c52 N77-25772
US-PATENT-CLASS-333-98R	c14 N73-13420	US-PATENT-CLASS-340-5C	c14 N73-27379
US-PATENT-CLASS-333-98R	c33 N75-30430	US-PATENT-CLASS-340-5H	c32 N77-21267
US-PATENT-CLASS-333-98S	c07 N72-25170	US-PATENT-CLASS-340-5R	c35 N74-16135
US-PATENT-CLASS-333-99S	c32 N80-32605	US-PATENT-CLASS-340-8LP	c71 N79-23753
US-PATENT-CLASS-333-204	c33 N81-17348	US-PATENT-CLASS-340-8R	c35 N74-16135
US-PATENT-CLASS-333-252	c32 N80-32605	US-PATENT-CLASS-340-12R	c35 N74-16135
US-PATENT-CLASS-333-262	c33 N80-18285	US-PATENT-CLASS-340-12R	c46 N79-23555
US-PATENT-CLASS-335-205	c09 N72-20199	US-PATENT-CLASS-340-15.5GC	c14 N73-26432
US-PATENT-CLASS-335-216	c16 N71-28554	US-PATENT-CLASS-340-25	c14 N73-16483
US-PATENT-CLASS-335-216	c23 N71-29049	US-PATENT-CLASS-340-26	c21 N72-22619
US-PATENT-CLASS-335-216	c26 N73-32571	US-PATENT-CLASS-340-27AT	c21 N73-14692
US-PATENT-CLASS-335-216	c20 N75-24837	US-PATENT-CLASS-340-27NA	c21 N73-13643
US-PATENT-CLASS-335-216	c33 N79-21264	US-PATENT-CLASS-340-27R	c14 N73-16483
US-PATENT-CLASS-335-296	c09 N73-30185	US-PATENT-CLASS-340-27R	c14 N73-20474
US-PATENT-CLASS-335-297	c09 N73-30185	US-PATENT-CLASS-340-27SS	c35 N78-14364
US-PATENT-CLASS-335-300	c09 N70-41929	US-PATENT-CLASS-340-33	c21 N73-13643
US-PATENT-CLASS-336-DIG.1	c26 N73-26752	US-PATENT-CLASS-340-38F	c66 N76-19888
US-PATENT-CLASS-336-DIG.1	c33 N79-17133	US-PATENT-CLASS-340-57	c14 N71-15620
US-PATENT-CLASS-336-60	c09 N72-27226	US-PATENT-CLASS-340-97	c21 N73-13643
US-PATENT-CLASS-336-178	c09 N72-17154	US-PATENT-CLASS-340-146.1	c09 N71-18843
US-PATENT-CLASS-336-198	c09 N72-27226	US-PATENT-CLASS-340-146.1	c08 N71-22749
US-PATENT-CLASS-336-200	c26 N73-26752	US-PATENT-CLASS-340-146.1	c10 N71-26103
US-PATENT-CLASS-336-210	c33 N74-17928	US-PATENT-CLASS-340-146.1	c08 N71-27255
US-PATENT-CLASS-336-220	c09 N72-27226	US-PATENT-CLASS-340-146.1	c08 N72-22167
US-PATENT-CLASS-337	c25 N79-28253	US-PATENT-CLASS-340-146.1	c08 N72-25207
US-PATENT-CLASS-337-75	c15 N72-12409	US-PATENT-CLASS-340-146.1	c07 N73-13149
US-PATENT-CLASS-337-114	c09 N71-29035	US-PATENT-CLASS-340-146.1AL	c08 N72-25210
US-PATENT-CLASS-337-121	c09 N71-29035	US-PATENT-CLASS-340-146.1AL	c08 N73-12175
US-PATENT-CLASS-337-334	c37 N77-19458	US-PATENT-CLASS-340-146.1AL	c32 N77-12240
US-PATENT-CLASS-337-354	c15 N72-12409	US-PATENT-CLASS-340-146.1AQ	c08 N73-12177
US-PATENT-CLASS-337-359	c15 N72-12409	US-PATENT-CLASS-340-146.1AQ	c32 N74-32598
US-PATENT-CLASS-338-2	c33 N75-31329	US-PATENT-CLASS-340-146.1AQ	c32 N77-12240
US-PATENT-CLASS-338-2	c35 N80-20560	US-PATENT-CLASS-340-146.1AV	c08 N73-12177
US-PATENT-CLASS-338-2	c52 N80-27072	US-PATENT-CLASS-340-146.1AV	c32 N77-12240
US-PATENT-CLASS-338-5	c32 N71-15574	US-PATENT-CLASS-340-146.1AX	c32 N79-10263
US-PATENT-CLASS-338-5	c52 N74-27864	US-PATENT-CLASS-340-146.1C	c07 N73-20176
US-PATENT-CLASS-338-6	c35 N76-14430	US-PATENT-CLASS-340-146.1E	c32 N79-10263
US-PATENT-CLASS-338-6	c52 N76-29695	US-PATENT-CLASS-340-146.2	c08 N71-12505
US-PATENT-CLASS-338-13	c24 N75-30260	US-PATENT-CLASS-340-146.2	c08 N71-23295
US-PATENT-CLASS-338-18	c35 N79-33449	US-PATENT-CLASS-340-146.3H	c74 N81-19896
US-PATENT-CLASS-338-25	c35 N77-21393	US-PATENT-CLASS-340-146.3F	c43 N77-10584
US-PATENT-CLASS-338-28	c35 N77-20400	US-PATENT-CLASS-340-146.3Q	c43 N77-10584
US-PATENT-CLASS-338-28	c35 N77-24454	US-PATENT-CLASS-340-146.3S	c74 N81-19896
US-PATENT-CLASS-338-32S	c33 N78-13320	US-PATENT-CLASS-340-146.3Y	c74 N81-19896
US-PATENT-CLASS-338-36	c35 N78-17359	US-PATENT-CLASS-340-147	c09 N70-33182
US-PATENT-CLASS-338-64	c09 N71-21583	US-PATENT-CLASS-340-147	c09 N70-38998
US-PATENT-CLASS-338-75	c37 N75-13265	US-PATENT-CLASS-340-147C	c60 N76-14818
US-PATENT-CLASS-338-82	c09 N71-20842	US-PATENT-CLASS-340-147R	c07 N73-20176
US-PATENT-CLASS-338-89	c35 N74-32677	US-PATENT-CLASS-340-147R	c60 N76-14818
US-PATENT-CLASS-338-97	c37 N75-13265	US-PATENT-CLASS-340-147SY	c17 N76-22245
US-PATENT-CLASS-338-99	c35 N76-17359	US-PATENT-CLASS-340-150	c10 N71-27272
US-PATENT-CLASS-338-100	c35 N76-17359	US-PATENT-CLASS-340-151	c33 N74-27862
US-PATENT-CLASS-338-114	c52 N74-27864	US-PATENT-CLASS-340-163	c07 N73-20176
US-PATENT-CLASS-338-162	c37 N75-13265	US-PATENT-CLASS-340-164	c10 N71-27272
US-PATENT-CLASS-338-229	c35 N77-24454	US-PATENT-CLASS-340-166	c10 N71-27272
US-PATENT-CLASS-338-283	c24 N75-30260	US-PATENT-CLASS-340-166	c10 N73-32144
US-PATENT-CLASS-338-320	c33 N74-14535	US-PATENT-CLASS-340-167	c07 N72-25173

US-PATENT-CLASS-340-171	c09	N72-22202	US-PATENT-CLASS-340-248	c10	N71-27338
US-PATENT-CLASS-340-171	c16	N73-16536	US-PATENT-CLASS-340-258	c10	N72-28240
US-PATENT-CLASS-340-172.5	c08	N69-21928	US-PATENT-CLASS-340-258R	c07	N73-25160
US-PATENT-CLASS-340-172.5	c09	N69-24333	US-PATENT-CLASS-340-262	c54	N78-32720
US-PATENT-CLASS-340-172.5	c08	N71-12502	US-PATENT-CLASS-340-271	c35	N77-30436
US-PATENT-CLASS-340-172.5	c08	N71-12506	US-PATENT-CLASS-340-277	c10	N73-30205
US-PATENT-CLASS-340-172.5	c31	N71-15566	US-PATENT-CLASS-340-279	c05	N72-16015
US-PATENT-CLASS-340-172.5	c08	N71-19288	US-PATENT-CLASS-340-279	c10	N73-30205
US-PATENT-CLASS-340-172.5	c08	N71-22707	US-PATENT-CLASS-340-279	c54	N78-32720
US-PATENT-CLASS-340-172.5	c08	N71-22710	US-PATENT-CLASS-340-285	c14	N71-25901
US-PATENT-CLASS-340-172.5	c07	N71-24624	US-PATENT-CLASS-340-285	c54	N78-32720
US-PATENT-CLASS-340-172.5	c08	N71-27255	US-PATENT-CLASS-340-309.1	c54	N78-32720
US-PATENT-CLASS-340-172.5	c07	N72-25172	US-PATENT-CLASS-340-309.4	c33	N81-14221
US-PATENT-CLASS-340-172.5	c08	N72-25207	US-PATENT-CLASS-340-310A	c33	N81-14221
US-PATENT-CLASS-340-172.5	c09	N72-25248	US-PATENT-CLASS-340-310R	c33	N81-14221
US-PATENT-CLASS-340-172.5	c08	N73-13187	US-PATENT-CLASS-340-324	c08	N71-12507
US-PATENT-CLASS-340-172.5	c08	N73-26176	US-PATENT-CLASS-340-324	c09	N71-33519
US-PATENT-CLASS-340-172.5	c60	N76-18800	US-PATENT-CLASS-340-324A	c09	N72-25248
US-PATENT-CLASS-340-172.5	c60	N76-21514	US-PATENT-CLASS-340-324AD	c33	N75-19517
US-PATENT-CLASS-340-172.5	c60	N77-12721	US-PATENT-CLASS-340-324R	c26	N72-25680
US-PATENT-CLASS-340-172.5	c60	N77-14751	US-PATENT-CLASS-340-332	c09	N72-25250
US-PATENT-CLASS-340-172.5	c60	N77-19760	US-PATENT-CLASS-340-336	c09	N71-33519
US-PATENT-CLASS-340-173	c10	N73-32144	US-PATENT-CLASS-340-347	c08	N70-35423
US-PATENT-CLASS-340-173.2	c08	N72-21198	US-PATENT-CLASS-340-347	c08	N70-40125
US-PATENT-CLASS-340-173CA	c33	N75-31331	US-PATENT-CLASS-340-347	c08	N71-12501
US-PATENT-CLASS-340-173CR	c60	N74-12888	US-PATENT-CLASS-340-347	c08	N71-18594
US-PATENT-CLASS-340-173LM	c60	N74-12888	US-PATENT-CLASS-340-347	c08	N71-19435
US-PATENT-CLASS-340-173LM	c60	N78-10709	US-PATENT-CLASS-340-347	c08	N71-19544
US-PATENT-CLASS-340-173LS	c08	N72-21198	US-PATENT-CLASS-340-347	c08	N71-19687
US-PATENT-CLASS-340-173LS	c36	N75-19652	US-PATENT-CLASS-340-347	c08	N71-24650
US-PATENT-CLASS-340-174	c08	N71-12504	US-PATENT-CLASS-340-347	c10	N71-25917
US-PATENT-CLASS-340-174	c09	N71-12515	US-PATENT-CLASS-340-347	c10	N71-26544
US-PATENT-CLASS-340-174	c08	N71-18595	US-PATENT-CLASS-340-347	c08	N73-28045
US-PATENT-CLASS-340-174	c08	N71-18694	US-PATENT-CLASS-340-347AD	c14	N71-28991
US-PATENT-CLASS-340-174	c10	N71-23033	US-PATENT-CLASS-340-347AD	c08	N72-21200
US-PATENT-CLASS-340-174	c10	N71-26418	US-PATENT-CLASS-340-347AD	c08	N72-22163
US-PATENT-CLASS-340-174	c10	N71-26434	US-PATENT-CLASS-340-347AD	c08	N72-22166
US-PATENT-CLASS-340-174	c08	N71-28925	US-PATENT-CLASS-340-347AD	c08	N72-31226
US-PATENT-CLASS-340-174	c10	N71-29135	US-PATENT-CLASS-340-347AD	c08	N73-20217
US-PATENT-CLASS-340-174.1	c08	N71-21042	US-PATENT-CLASS-340-347AD	c35	N74-17885
US-PATENT-CLASS-340-174.1	c07	N71-23001	US-PATENT-CLASS-340-347AD	c35	N74-32877
US-PATENT-CLASS-340-174.1	c08	N71-27210	US-PATENT-CLASS-340-347AD	c33	N76-18345
US-PATENT-CLASS-340-174.1L	c35	N74-11283	US-PATENT-CLASS-340-347AD	c60	N77-32731
US-PATENT-CLASS-340-174.1H	c36	N74-13205	US-PATENT-CLASS-340-347DA	c08	N71-27057
US-PATENT-CLASS-340-174.1H	c35	N78-29421	US-PATENT-CLASS-340-347DA	c08	N72-20176
US-PATENT-CLASS-340-174.1H	c35	N79-16246	US-PATENT-CLASS-340-347DA	c08	N72-25206
US-PATENT-CLASS-340-174.1R	c21	N73-13644	US-PATENT-CLASS-340-347DA	c08	N73-32081
US-PATENT-CLASS-340-174AG	c23	N72-17747	US-PATENT-CLASS-340-347DD	c10	N71-33407
US-PATENT-CLASS-340-174CS	c08	N72-21199	US-PATENT-CLASS-340-347DD	c08	N72-18184
US-PATENT-CLASS-340-174CT	c23	N72-17747	US-PATENT-CLASS-340-347DD	c08	N72-20176
US-PATENT-CLASS-340-174GA	c23	N72-17747	US-PATENT-CLASS-340-347DD	c08	N72-21197
US-PATENT-CLASS-340-174LC	c08	N72-21199	US-PATENT-CLASS-340-347DD	c08	N73-12176
US-PATENT-CLASS-340-174H	c08	N72-21199	US-PATENT-CLASS-340-347DD	c60	N76-23850
US-PATENT-CLASS-340-174MA	c24	N75-13032	US-PATENT-CLASS-340-347DD	c32	N77-12239
US-PATENT-CLASS-340-174SC	c23	N72-17747	US-PATENT-CLASS-340-347DD	c60	N78-17691
US-PATENT-CLASS-340-174SR	c08	N72-21199	US-PATENT-CLASS-340-347DD	c60	N79-20751
US-PATENT-CLASS-340-174YC	c36	N74-13205	US-PATENT-CLASS-340-347P	c60	N76-23850
US-PATENT-CLASS-340-174YC	c35	N78-29421	US-PATENT-CLASS-340-347P	c35	N77-30436
US-PATENT-CLASS-340-177	c09	N72-17153	US-PATENT-CLASS-340-347R	c08	N72-22165
US-PATENT-CLASS-340-177VA	c06	N80-18036	US-PATENT-CLASS-340-347SH	c33	N77-31404
US-PATENT-CLASS-340-182	c33	N74-27862	US-PATENT-CLASS-340-347SY	c62	N76-31946
US-PATENT-CLASS-340-183	c52	N74-26625	US-PATENT-CLASS-340-347SY	c35	N77-30436
US-PATENT-CLASS-340-185M	c17	N76-29347	US-PATENT-CLASS-340-348	c08	N72-22167
US-PATENT-CLASS-340-198	c14	N70-33179	US-PATENT-CLASS-340-403	c10	N71-27272
US-PATENT-CLASS-340-198	c07	N71-11298	US-PATENT-CLASS-340-407	c71	N74-21014
US-PATENT-CLASS-340-200	c33	N74-27862	US-PATENT-CLASS-340-412	c10	N71-24798
US-PATENT-CLASS-340-200	c33	N77-31404	US-PATENT-CLASS-340-415	c10	N73-32144
US-PATENT-CLASS-340-203	c09	N72-22202	US-PATENT-CLASS-340-418	c14	N73-16484
US-PATENT-CLASS-340-203	c52	N74-26625	US-PATENT-CLASS-340-602	c33	N80-23559
US-PATENT-CLASS-340-206	c17	N76-29347	US-PATENT-CLASS-340-604	c33	N80-23559
US-PATENT-CLASS-340-207	c07	N73-25160	US-PATENT-CLASS-340-650	c33	N79-18193
US-PATENT-CLASS-340-207P	c17	N76-22245	US-PATENT-CLASS-340-664	c33	N79-18193
US-PATENT-CLASS-340-207R	c52	N74-26625	US-PATENT-CLASS-340-870.24	c33	N81-14221
US-PATENT-CLASS-340-210	c03	N72-20031	US-PATENT-CLASS-343-DIG.2	c07	N73-24176
US-PATENT-CLASS-340-213	c10	N71-27272	US-PATENT-CLASS-343-DIG.2	c33	N74-20860
US-PATENT-CLASS-340-213.1	c10	N71-19417	US-PATENT-CLASS-343-DIG.3	c09	N72-12136
US-PATENT-CLASS-340-213R	c54	N78-32720	US-PATENT-CLASS-343-5CM	c07	N72-21118
US-PATENT-CLASS-340-223	c10	N73-32144	US-PATENT-CLASS-343-5CM	c32	N77-21267
US-PATENT-CLASS-340-224	c37	N77-19458	US-PATENT-CLASS-343-5CM	c32	N77-32342
US-PATENT-CLASS-340-227	c10	N71-16058	US-PATENT-CLASS-343-5CM	c35	N79-10391
US-PATENT-CLASS-340-227	c14	N71-27186	US-PATENT-CLASS-343-5CM	c32	N79-14268
US-PATENT-CLASS-340-227R	c14	N72-25412	US-PATENT-CLASS-343-5CM	c43	N80-18498
US-PATENT-CLASS-340-228.2	c10	N72-17173	US-PATENT-CLASS-343-5DP	c07	N72-11149
US-PATENT-CLASS-340-228S	c14	N73-16484	US-PATENT-CLASS-343-5DP	c09	N73-12211
US-PATENT-CLASS-340-233	c14	N71-25901	US-PATENT-CLASS-343-5DP	c32	N77-32342
US-PATENT-CLASS-340-235	c10	N71-26334	US-PATENT-CLASS-343-5GC	c32	N75-24982
US-PATENT-CLASS-340-237S	c45	N76-17656	US-PATENT-CLASS-343-5MM	c32	N77-21267
US-PATENT-CLASS-340-240	c09	N72-27227	US-PATENT-CLASS-343-5NA	c31	N79-28370
US-PATENT-CLASS-340-242	c35	N75-19612	US-PATENT-CLASS-343-5W	c35	N79-10391

US-PATENT-CLASS-343-5W	c43 N80-18498	US-PATENT-CLASS-343-100ST	c33 N80-18287
US-PATENT-CLASS-343-6	c30 N71-16090	US-PATENT-CLASS-343-100TD	c32 N79-24210
US-PATENT-CLASS-343-6.EB	c32 N77-20289	US-PATENT-CLASS-343-100TD	c32 N81-14185
US-PATENT-CLASS-343-6.5	c21 N71-11766	US-PATENT-CLASS-343-105R	c32 N75-26194
US-PATENT-CLASS-343-6.5	c10 N71-23099	US-PATENT-CLASS-343-108R	c04 N74-13420
US-PATENT-CLASS-343-6.5R	c07 N72-12080	US-PATENT-CLASS-343-112	c21 N71-13958
US-PATENT-CLASS-343-6.5R	c07 N72-21118	US-PATENT-CLASS-343-112	c02 N71-19287
US-PATENT-CLASS-343-6.5R	c07 N72-25171	US-PATENT-CLASS-343-112	c21 N71-24948
US-PATENT-CLASS-343-6.5R	c08 N72-25209	US-PATENT-CLASS-343-112CA	c21 N73-13643
US-PATENT-CLASS-343-6.5R	c07 N73-25161	US-PATENT-CLASS-343-112CA	c21 N73-30641
US-PATENT-CLASS-343-6.5R	c21 N73-30641	US-PATENT-CLASS-343-112CA	c03 N75-30132
US-PATENT-CLASS-343-6.5R	c32 N74-12912	US-PATENT-CLASS-343-112D	c14 N72-28437
US-PATENT-CLASS-343-6.5R	c32 N75-15854	US-PATENT-CLASS-343-112D	c32 N75-26194
US-PATENT-CLASS-343-6.5R	c03 N75-30132	US-PATENT-CLASS-343-112D	c46 N80-14603
US-PATENT-CLASS-343-6.5R	c32 N77-20289	US-PATENT-CLASS-343-112R	c09 N73-32110
US-PATENT-CLASS-343-6.5SS	c32 N74-12512	US-PATENT-CLASS-343-112R	c17 N78-17140
US-PATENT-CLASS-343-6.8R	c07 N72-12080	US-PATENT-CLASS-343-112R	c04 N80-32359
US-PATENT-CLASS-343-6.8R	c07 N73-25161	US-PATENT-CLASS-343-112R	c32 N81-27341
US-PATENT-CLASS-343-6.8R	c14 N73-25461	US-PATENT-CLASS-343-112TC	c17 N76-21250
US-PATENT-CLASS-343-6R	c32 N79-10264	US-PATENT-CLASS-343-113	c10 N71-21473
US-PATENT-CLASS-343-7.4	c10 N72-22235	US-PATENT-CLASS-343-113	c07 N71-24625
US-PATENT-CLASS-343-7.4	c32 N79-13214	US-PATENT-CLASS-343-113E	c09 N73-32110
US-PATENT-CLASS-343-7.5	c07 N69-39974	US-PATENT-CLASS-343-113R	c44 N78-28594
US-PATENT-CLASS-343-7.5	c09 N71-24595	US-PATENT-CLASS-343-117	c07 N71-27056
US-PATENT-CLASS-343-7.5	c07 N72-11149	US-PATENT-CLASS-343-117R	c32 N79-13214
US-PATENT-CLASS-343-7.5	c44 N74-19870	US-PATENT-CLASS-343-118	c32 N79-13214
US-PATENT-CLASS-343-9	c32 N75-15854	US-PATENT-CLASS-343-119	c44 N78-28594
US-PATENT-CLASS-343-9	c32 N79-10264	US-PATENT-CLASS-343-176	c07 N71-27056
US-PATENT-CLASS-343-10	c32 N77-32342	US-PATENT-CLASS-343-176	c32 N76-14321
US-PATENT-CLASS-343-11R	c09 N73-12211	US-PATENT-CLASS-343-179	c07 N72-11149
US-PATENT-CLASS-343-11VB	c09 N73-12211	US-PATENT-CLASS-343-179	c07 N73-20174
US-PATENT-CLASS-343-12	c21 N70-41530	US-PATENT-CLASS-343-179	c32 N78-15323
US-PATENT-CLASS-343-12	c10 N72-20224	US-PATENT-CLASS-343-179	c32 N79-20296
US-PATENT-CLASS-343-12R	c08 N72-25209	US-PATENT-CLASS-343-200	c07 N73-16121
US-PATENT-CLASS-343-13	c09 N71-18598	US-PATENT-CLASS-343-204	c07 N73-26118
US-PATENT-CLASS-343-14	c07 N70-41680	US-PATENT-CLASS-343-225	c17 N78-17140
US-PATENT-CLASS-343-14	c08 N72-25209	US-PATENT-CLASS-343-700MS	c32 N78-24391
US-PATENT-CLASS-343-14	c14 N73-25461	US-PATENT-CLASS-343-700MS	c32 N80-32604
US-PATENT-CLASS-343-14	c32 N79-14267	US-PATENT-CLASS-343-703	c09 N71-13521
US-PATENT-CLASS-343-14	c31 N79-28370	US-PATENT-CLASS-343-703	c07 N71-24614
US-PATENT-CLASS-343-14	c09 N71-20864	US-PATENT-CLASS-343-705	c07 N70-38200
US-PATENT-CLASS-343-16	c10 N71-21483	US-PATENT-CLASS-343-705	c07 N70-40202
US-PATENT-CLASS-343-16M	c10 N72-22235	US-PATENT-CLASS-343-705	c31 N71-10747
US-PATENT-CLASS-343-16M	c44 N78-28594	US-PATENT-CLASS-343-705	c03 N76-32140
US-PATENT-CLASS-343-17.2	c07 N70-36911	US-PATENT-CLASS-343-706	c07 N72-21117
US-PATENT-CLASS-343-17.2PC	c35 N79-10391	US-PATENT-CLASS-343-708	c09 N71-22888
US-PATENT-CLASS-343-17.5	c14 N73-25461	US-PATENT-CLASS-343-708	c07 N71-22984
US-PATENT-CLASS-343-17.5	c32 N75-15854	US-PATENT-CLASS-343-708	c07 N71-28980
US-PATENT-CLASS-343-17.7	c07 N71-12391	US-PATENT-CLASS-343-708	c09 N72-25247
US-PATENT-CLASS-343-17.7	c44 N74-19870	US-PATENT-CLASS-343-708	c32 N74-20864
US-PATENT-CLASS-343-17.7	c32 N77-31350	US-PATENT-CLASS-343-718	c09 N71-18720
US-PATENT-CLASS-343-17.7	c32 N79-11265	US-PATENT-CLASS-343-720	c09 N72-12136
US-PATENT-CLASS-343-18	c31 N70-37981	US-PATENT-CLASS-343-725	c07 N73-28013
US-PATENT-CLASS-343-18	c07 N70-40663	US-PATENT-CLASS-343-727	c32 N81-14187
US-PATENT-CLASS-343-18	c30 N70-40309	US-PATENT-CLASS-343-729	c07 N73-28013
US-PATENT-CLASS-343-18	c07 N70-41678	US-PATENT-CLASS-343-730	c32 N74-20863
US-PATENT-CLASS-343-18A	c32 N80-14281	US-PATENT-CLASS-343-754	c09 N73-19234
US-PATENT-CLASS-343-18B	c32 N74-12912	US-PATENT-CLASS-343-755	c33 N76-27472
US-PATENT-CLASS-343-18B	c32 N77-21267	US-PATENT-CLASS-343-755	c32 N81-25278
US-PATENT-CLASS-343-18B	c43 N80-18498	US-PATENT-CLASS-343-761	c33 N75-19516
US-PATENT-CLASS-343-18D	c43 N80-18498	US-PATENT-CLASS-343-761	c32 N76-21365
US-PATENT-CLASS-343-100	c10 N71-18722	US-PATENT-CLASS-343-762	c07 N72-25174
US-PATENT-CLASS-343-100	c07 N71-19854	US-PATENT-CLASS-343-768	c10 N71-26142
US-PATENT-CLASS-343-100	c30 N71-23723	US-PATENT-CLASS-343-769	c32 N74-20864
US-PATENT-CLASS-343-100	c07 N71-24621	US-PATENT-CLASS-343-770	c09 N72-31235
US-PATENT-CLASS-343-100	c09 N71-24804	US-PATENT-CLASS-343-770	c33 N76-14372
US-PATENT-CLASS-343-100	c31 N71-24813	US-PATENT-CLASS-343-771	c07 N71-28809
US-PATENT-CLASS-343-100	c07 N71-27056	US-PATENT-CLASS-343-771	c07 N72-11148
US-PATENT-CLASS-343-100	c07 N71-28900	US-PATENT-CLASS-343-771	c09 N72-21244
US-PATENT-CLASS-343-100CL	c32 N77-32342	US-PATENT-CLASS-343-771	c07 N72-22127
US-PATENT-CLASS-343-100CL	c32 N79-14268	US-PATENT-CLASS-343-771	c09 N72-25247
US-PATENT-CLASS-343-100CL	c32 N81-29308	US-PATENT-CLASS-343-771	c09 N72-31235
US-PATENT-CLASS-343-100SE	c14 N72-28437	US-PATENT-CLASS-343-772	c07 N72-20141
US-PATENT-CLASS-343-100SE	c14 N73-26432	US-PATENT-CLASS-343-772	c32 N81-25278
US-PATENT-CLASS-343-100SE	c46 N80-14603	US-PATENT-CLASS-343-773	c07 N72-20141
US-PATENT-CLASS-343-100SE	c35 N80-18359	US-PATENT-CLASS-343-776	c07 N71-12396
US-PATENT-CLASS-343-100SE	c32 N75-24982	US-PATENT-CLASS-343-777	c07 N71-27233
US-PATENT-CLASS-343-100SE	c33 N81-26358	US-PATENT-CLASS-343-777	c07 N72-25174
US-PATENT-CLASS-343-100R	c10 N73-16206	US-PATENT-CLASS-343-779	c07 N71-11285
US-PATENT-CLASS-343-100R	c33 N80-18287	US-PATENT-CLASS-343-779	c10 N72-22235
US-PATENT-CLASS-343-100SA	c10 N73-16206	US-PATENT-CLASS-343-779	c07 N72-25174
US-PATENT-CLASS-343-100SA	c33 N74-20860	US-PATENT-CLASS-343-779	c32 N76-15329
US-PATENT-CLASS-343-100SA	c17 N76-21250	US-PATENT-CLASS-343-779	c33 N76-27472
US-PATENT-CLASS-343-100SA	c32 N80-28578	US-PATENT-CLASS-343-781	c09 N70-35219
US-PATENT-CLASS-343-100ST	c07 N72-21118	US-PATENT-CLASS-343-781	c09 N70-35382
US-PATENT-CLASS-343-100ST	c33 N74-20660	US-PATENT-CLASS-343-781	c09 N70-35425
US-PATENT-CLASS-343-100ST	c32 N75-15854	US-PATENT-CLASS-343-781	c07 N72-32169
US-PATENT-CLASS-343-100ST	c17 N76-21250	US-PATENT-CLASS-343-781	c32 N74-11000
US-PATENT-CLASS-343-100ST	c32 N77-20289	US-PATENT-CLASS-343-781	c33 N75-19516

US-PATENT-CLASS-343-781	.....	c32 N76-21365	US-PATENT-CLASS-343-915	.....	c32 N76-18295
US-PATENT-CLASS-343-781CA	.....	c32 N78-31521	US-PATENT-CLASS-343-915	.....	c33 N76-32457
US-PATENT-CLASS-343-781B	.....	c32 N81-25278	US-PATENT-CLASS-346-1	.....	c12 N71-20815
US-PATENT-CLASS-343-782	.....	c07 N73-14130	US-PATENT-CLASS-346-1	.....	c09 N72-21246
US-PATENT-CLASS-343-782	.....	c32 N78-31521	US-PATENT-CLASS-346-23	.....	c14 N72-18411
US-PATENT-CLASS-343-784	.....	c07 N71-28580	US-PATENT-CLASS-346-24	.....	c35 N74-15831
US-PATENT-CLASS-343-786	.....	c07 N71-15907	US-PATENT-CLASS-346-29	.....	c09 N72-21246
US-PATENT-CLASS-343-786	.....	c07 N71-22750	US-PATENT-CLASS-346-33B	.....	c35 N74-32877
US-PATENT-CLASS-343-786	.....	c07 N71-26101	US-PATENT-CLASS-346-44	.....	c09 N69-21467
US-PATENT-CLASS-343-786	.....	c07 N71-27233	US-PATENT-CLASS-346-50	.....	c14 N71-21006
US-PATENT-CLASS-343-786	.....	c07 N72-20141	US-PATENT-CLASS-346-74ND	.....	c21 N73-13644
US-PATENT-CLASS-343-786	.....	c10 N72-22235	US-PATENT-CLASS-346-74MT	.....	c35 N79-16246
US-PATENT-CLASS-343-786	.....	c07 N72-25174	US-PATENT-CLASS-346-107	.....	c23 N71-23976
US-PATENT-CLASS-343-786	.....	c09 N72-31235	US-PATENT-CLASS-346-107A	.....	c14 N72-18411
US-PATENT-CLASS-343-786	.....	c32 N74-20863	US-PATENT-CLASS-346-108	.....	c35 N74-15831
US-PATENT-CLASS-343-786	.....	c32 N76-15330	US-PATENT-CLASS-346-110	.....	c14 N73-32322
US-PATENT-CLASS-343-786	.....	c32 N76-21365	US-PATENT-CLASS-346-138	.....	c21 N73-13644
US-PATENT-CLASS-343-786	.....	c32 N80-23524	US-PATENT-CLASS-346-138	.....	c35 N74-15831
US-PATENT-CLASS-343-786	.....	c32 N80-29539	US-PATENT-CLASS-346B	.....	c73 N77-18891
US-PATENT-CLASS-343-786	.....	c32 N81-25278	US-PATENT-CLASS-349	.....	c25 N79-28253
US-PATENT-CLASS-343-789	.....	c32 N81-14187	US-PATENT-CLASS-350-1	.....	c23 N69-24332
US-PATENT-CLASS-343-797	.....	c09 N71-24842	US-PATENT-CLASS-350-1	.....	c07 N71-29065
US-PATENT-CLASS-343-797	.....	c07 N72-22127	US-PATENT-CLASS-350-1	.....	c16 N72-12440
US-PATENT-CLASS-343-797	.....	c09 N72-31235	US-PATENT-CLASS-350-1	.....	c24 N76-24363
US-PATENT-CLASS-343-797	.....	c07 N73-28013	US-PATENT-CLASS-350-1	.....	c74 N78-15879
US-PATENT-CLASS-343-797	.....	c32 N74-20863	US-PATENT-CLASS-350-2	.....	c23 N71-30027
US-PATENT-CLASS-343-797	.....	c33 N76-14372	US-PATENT-CLASS-350-3.5	.....	c16 N71-15551
US-PATENT-CLASS-343-797	.....	c32 N81-14187	US-PATENT-CLASS-350-3.5	.....	c16 N71-15565
US-PATENT-CLASS-343-799	.....	c07 N71-27233	US-PATENT-CLASS-350-3.5	.....	c16 N71-15567
US-PATENT-CLASS-343-803	.....	c07 N73-28613	US-PATENT-CLASS-350-3.5	.....	c16 N71-26154
US-PATENT-CLASS-343-823	.....	c07 N71-28979	US-PATENT-CLASS-350-3.5	.....	c16 N71-29131
US-PATENT-CLASS-343-830	.....	c32 N80-32604	US-PATENT-CLASS-350-3.5	.....	c14 N72-17324
US-PATENT-CLASS-343-833	.....	c31 N70-34135	US-PATENT-CLASS-350-3.5	.....	c16 N73-30476
US-PATENT-CLASS-343-837	.....	c07 N72-32169	US-PATENT-CLASS-350-3.5	.....	c35 N74-15146
US-PATENT-CLASS-343-837	.....	c07 N73-14130	US-PATENT-CLASS-350-3.5	.....	c35 N74-17153
US-PATENT-CLASS-343-837	.....	c33 N75-19516	US-PATENT-CLASS-350-3.5	.....	c35 N74-26946
US-PATENT-CLASS-343-837	.....	c32 N76-15329	US-PATENT-CLASS-350-3.5	.....	c35 N75-25124
US-PATENT-CLASS-343-837	.....	c32 N76-18295	US-PATENT-CLASS-350-3.5	.....	c35 N75-27328
US-PATENT-CLASS-343-837	.....	c32 N78-31321	US-PATENT-CLASS-350-3.5	.....	c35 N76-18402
US-PATENT-CLASS-343-839	.....	c09 N73-19234	US-PATENT-CLASS-350-3.5	.....	c35 N78-17357
US-PATENT-CLASS-343-840	.....	c07 N71-27233	US-PATENT-CLASS-350-3.5	.....	c38 N78-32447
US-PATENT-CLASS-343-840	.....	c09 N72-12136	US-PATENT-CLASS-350-6	.....	c14 N69-27461
US-PATENT-CLASS-343-840	.....	c07 N72-32169	US-PATENT-CLASS-350-6	.....	c36 N74-15145
US-PATENT-CLASS-343-840	.....	c32 N76-18295	US-PATENT-CLASS-350-6.5	.....	c32 N80-24510
US-PATENT-CLASS-343-844	.....	c32 N79-11264	US-PATENT-CLASS-350-6.6	.....	c32 N80-24510
US-PATENT-CLASS-343-844	.....	c32 N80-28578	US-PATENT-CLASS-350-7	.....	c74 N74-15095
US-PATENT-CLASS-343-846	.....	c33 N76-14372	US-PATENT-CLASS-350-16	.....	c14 N72-22444
US-PATENT-CLASS-343-853	.....	c07 N72-11148	US-PATENT-CLASS-350-19	.....	c14 N72-22441
US-PATENT-CLASS-343-853	.....	c07 N72-22127	US-PATENT-CLASS-350-23	.....	c14 N72-22441
US-PATENT-CLASS-343-853	.....	c07 N72-25174	US-PATENT-CLASS-350-25	.....	c74 N80-21138
US-PATENT-CLASS-343-853	.....	c09 N72-31235	US-PATENT-CLASS-350-26	.....	c14 N72-22441
US-PATENT-CLASS-343-853	.....	c10 N73-16206	US-PATENT-CLASS-350-35	.....	c14 N72-22441
US-PATENT-CLASS-343-853	.....	c32 N74-20863	US-PATENT-CLASS-350-36	.....	c14 N72-22441
US-PATENT-CLASS-343-853	.....	c32 N74-20864	US-PATENT-CLASS-350-49	.....	c14 N72-22441
US-PATENT-CLASS-343-854	.....	c07 N69-27460	US-PATENT-CLASS-350-52	.....	c14 N72-22441
US-PATENT-CLASS-343-854	.....	c07 N71-27233	US-PATENT-CLASS-350-52	.....	c14 N72-22444
US-PATENT-CLASS-343-854	.....	c09 N73-19234	US-PATENT-CLASS-350-55	.....	c23 N71-33229
US-PATENT-CLASS-343-854	.....	c33 N74-20660	US-PATENT-CLASS-350-55	.....	c14 N73-30393
US-PATENT-CLASS-343-854	.....	c33 N76-27472	US-PATENT-CLASS-350-55	.....	c23 N73-30666
US-PATENT-CLASS-343-854	.....	c32 N79-11264	US-PATENT-CLASS-350-55	.....	c89 N79-10969
US-PATENT-CLASS-343-854	.....	c32 N80-28578	US-PATENT-CLASS-350-55	.....	c74 N80-33210
US-PATENT-CLASS-343-872	.....	c07 N71-28580	US-PATENT-CLASS-350-58	.....	c14 N71-15604
US-PATENT-CLASS-343-873	.....	c07 N71-19493	US-PATENT-CLASS-350-79	.....	c14 N72-32452
US-PATENT-CLASS-343-873	.....	c09 N72-25247	US-PATENT-CLASS-350-86	.....	c14 N72-22445
US-PATENT-CLASS-343-876	.....	c32 N76-15329	US-PATENT-CLASS-350-96	.....	c07 N71-26291
US-PATENT-CLASS-343-880	.....	c07 N73-26117	US-PATENT-CLASS-350-96.25	.....	c33 N81-29342
US-PATENT-CLASS-343-880	.....	c18 N80-14183	US-PATENT-CLASS-350-96B	.....	c60 N77-14751
US-PATENT-CLASS-343-882	.....	c33 N76-32457	US-PATENT-CLASS-350-96B	.....	c60 N77-32731
US-PATENT-CLASS-343-883	.....	c07 N73-26117	US-PATENT-CLASS-350-96B	.....	c60 N78-10709
US-PATENT-CLASS-343-883	.....	c18 N80-14183	US-PATENT-CLASS-350-96WG	.....	c36 N75-31427
US-PATENT-CLASS-343-884	.....	c07 N71-27191	US-PATENT-CLASS-350-96WG	.....	c36 N76-18428
US-PATENT-CLASS-343-889	.....	c07 N73-26117	US-PATENT-CLASS-350-96WG	.....	c36 N76-24553
US-PATENT-CLASS-343-893	.....	c09 N72-21244	US-PATENT-CLASS-350-100	.....	c36 N77-25501
US-PATENT-CLASS-343-893	.....	c07 N73-28013	US-PATENT-CLASS-350-102	.....	c23 N71-29123
US-PATENT-CLASS-343-895	.....	c09 N73-19234	US-PATENT-CLASS-350-102	.....	c36 N77-25501
US-PATENT-CLASS-343-895	.....	c07 N73-26117	US-PATENT-CLASS-350-138	.....	c23 N72-27728
US-PATENT-CLASS-343-895	.....	c32 N80-23524	US-PATENT-CLASS-350-145	.....	c74 N77-20882
US-PATENT-CLASS-343-909	.....	c32 N74-11000	US-PATENT-CLASS-350-147	.....	c14 N72-27409
US-PATENT-CLASS-343-909	.....	c35 N76-15435	US-PATENT-CLASS-350-150	.....	c26 N72-25680
US-PATENT-CLASS-343-909	.....	c33 N79-28416	US-PATENT-CLASS-350-150	.....	c36 N76-18427
US-PATENT-CLASS-343-909	.....	c32 N80-14281	US-PATENT-CLASS-350-151	.....	c36 N74-13205
US-PATENT-CLASS-343-912	.....	c07 N72-21117	US-PATENT-CLASS-350-151	.....	c35 N78-29421
US-PATENT-CLASS-343-912	.....	c07 N72-22127	US-PATENT-CLASS-350-157	.....	c74 N79-14891
US-PATENT-CLASS-343-912	.....	c32 N76-18295	US-PATENT-CLASS-350-159	.....	c74 N78-17865
US-PATENT-CLASS-343-915	.....	c31 N71-16102	US-PATENT-CLASS-350-160	.....	c36 N76-18427
US-PATENT-CLASS-343-915	.....	c09 N71-20658	US-PATENT-CLASS-350-160R	.....	c14 N72-25410
US-PATENT-CLASS-343-915	.....	c07 N72-32169	US-PATENT-CLASS-350-160R	.....	c26 N72-25680
US-PATENT-CLASS-343-915	.....	c07 N73-14130	US-PATENT-CLASS-350-161	.....	c26 N72-27784
US-PATENT-CLASS-343-915	.....	c07 N73-24176	US-PATENT-CLASS-350-161	.....	c36 N75-31427

US-PATENT-CLASS-350-162	c14 N72-17323	US-PATENT-CLASS-351-166	c74 N78-32854
US-PATENT-CLASS-350-162R	c74 N80-21140	US-PATENT-CLASS-352-84	c16 N71-33410
US-PATENT-CLASS-350-162SF	c23 N73-30666	US-PATENT-CLASS-352-84	c14 N72-18411
US-PATENT-CLASS-350-162SF	c74 N76-31598	US-PATENT-CLASS-352-169	c14 N73-14427
US-PATENT-CLASS-350-162SF	c74 N77-28932	US-PATENT-CLASS-353-54	c34 N74-23066
US-PATENT-CLASS-350-162SF	c36 N77-32478	US-PATENT-CLASS-353-61	c34 N74-23066
US-PATENT-CLASS-350-165	c27 N78-31233	US-PATENT-CLASS-354-77	c74 N79-20856
US-PATENT-CLASS-350-170	c73 N78-32848	US-PATENT-CLASS-354-118	c74 N81-17886
US-PATENT-CLASS-350-171	c23 N72-23695	US-PATENT-CLASS-354-234	c33 N74-20861
US-PATENT-CLASS-350-173	c73 N78-32848	US-PATENT-CLASS-354-234	c70 N74-21300
US-PATENT-CLASS-350-174	c74 N77-20882	US-PATENT-CLASS-355-18	c14 N73-33361
US-PATENT-CLASS-350-174	c73 N78-32848	US-PATENT-CLASS-356-4	c14 N72-17326
US-PATENT-CLASS-350-175E	c74 N80-27185	US-PATENT-CLASS-356-4	c07 N73-26119
US-PATENT-CLASS-350-175FS	c14 N72-25414	US-PATENT-CLASS-356-4	c36 N74-15145
US-PATENT-CLASS-350-175NG	c27 N78-31233	US-PATENT-CLASS-356-4	c35 N75-15014
US-PATENT-CLASS-350-189	c23 N71-24857	US-PATENT-CLASS-356-5	c07 N73-26119
US-PATENT-CLASS-350-199	c14 N73-30393	US-PATENT-CLASS-356-5	c36 N74-15145
US-PATENT-CLASS-350-202	c23 N73-20741	US-PATENT-CLASS-356-5	c36 N75-15028
US-PATENT-CLASS-350-202	c74 N77-28932	US-PATENT-CLASS-356-17	c14 N72-21409
US-PATENT-CLASS-350-203	c14 N72-25409	US-PATENT-CLASS-356-18	c14 N72-21409
US-PATENT-CLASS-350-204	c14 N73-30393	US-PATENT-CLASS-356-28	c21 N71-19212
US-PATENT-CLASS-350-204	c74 N78-17866	US-PATENT-CLASS-356-28	c16 N71-24828
US-PATENT-CLASS-350-211	c44 N76-14602	US-PATENT-CLASS-356-28	c72 N74-19310
US-PATENT-CLASS-350-213	c14 N71-15622	US-PATENT-CLASS-356-28	c36 N75-15028
US-PATENT-CLASS-350-226	c74 N80-27185	US-PATENT-CLASS-356-28	c35 N75-16783
US-PATENT-CLASS-350-236	c74 N74-15095	US-PATENT-CLASS-356-28	c36 N76-14447
US-PATENT-CLASS-350-253	c35 N77-27366	US-PATENT-CLASS-356-28	c36 N77-25501
US-PATENT-CLASS-350-269	c33 N74-20861	US-PATENT-CLASS-356-28	c74 N78-17866
US-PATENT-CLASS-350-270	c70 N74-21300	US-PATENT-CLASS-356-28	c35 N79-18296
US-PATENT-CLASS-350-275	c09 N71-19479	US-PATENT-CLASS-356-28	c36 N80-16321
US-PATENT-CLASS-350-265	c14 N71-15605	US-PATENT-CLASS-356-28.5	c32 N80-24510
US-PATENT-CLASS-350-265	c14 N71-17662	US-PATENT-CLASS-356-28.5	c36 N81-24422
US-PATENT-CLASS-350-265	c19 N71-26674	US-PATENT-CLASS-356-32	c14 N72-11364
US-PATENT-CLASS-350-265	c15 N72-11386	US-PATENT-CLASS-356-32	c32 N73-20740
US-PATENT-CLASS-350-285	c16 N73-33397	US-PATENT-CLASS-356-32	c39 N81-25400
US-PATENT-CLASS-350-285	c74 N74-15095	US-PATENT-CLASS-356-36	c23 N71-16365
US-PATENT-CLASS-350-285	c74 N80-21138	US-PATENT-CLASS-356-37	c45 N76-21742
US-PATENT-CLASS-350-286	c07 N71-29065	US-PATENT-CLASS-356-43	c74 N74-15095
US-PATENT-CLASS-350-286	c73 N78-32848	US-PATENT-CLASS-356-43	c75 N74-30156
US-PATENT-CLASS-350-287	c15 N72-11386	US-PATENT-CLASS-356-51	c06 N72-31141
US-PATENT-CLASS-350-288	c23 N71-29123	US-PATENT-CLASS-356-51	c35 N75-30502
US-PATENT-CLASS-350-288	c12 N76-15189	US-PATENT-CLASS-356-71	c66 N76-19888
US-PATENT-CLASS-350-288	c74 N77-28933	US-PATENT-CLASS-356-72	c14 N71-23268
US-PATENT-CLASS-350-288	c44 N79-11471	US-PATENT-CLASS-356-72	c33 N73-27796
US-PATENT-CLASS-350-288	c44 N79-24433	US-PATENT-CLASS-356-72	c38 N78-32447
US-PATENT-CLASS-350-292	c35 N75-12273	US-PATENT-CLASS-356-72	c74 N80-33210
US-PATENT-CLASS-350-292	c44 N79-14529	US-PATENT-CLASS-356-73	c75 N74-30156
US-PATENT-CLASS-350-292	c44 N79-24432	US-PATENT-CLASS-356-73	c38 N78-32447
US-PATENT-CLASS-350-293	c16 N73-16536	US-PATENT-CLASS-356-74	c30 N71-15990
US-PATENT-CLASS-350-293	c12 N76-15189	US-PATENT-CLASS-356-76	c23 N71-26206
US-PATENT-CLASS-350-293	c44 N76-24696	US-PATENT-CLASS-356-76	c14 N71-29041
US-PATENT-CLASS-350-293	c44 N78-10554	US-PATENT-CLASS-356-83	c35 N75-19613
US-PATENT-CLASS-350-293	c44 N79-14529	US-PATENT-CLASS-356-85	c37 N74-18123
US-PATENT-CLASS-350-294	c89 N79-10969	US-PATENT-CLASS-356-85	c75 N74-30156
US-PATENT-CLASS-350-294	c44 N79-24432	US-PATENT-CLASS-356-87	c75 N74-30156
US-PATENT-CLASS-350-294	c32 N80-24510	US-PATENT-CLASS-356-96	c35 N75-19613
US-PATENT-CLASS-350-255	c44 N77-32583	US-PATENT-CLASS-356-97	c35 N77-14411
US-PATENT-CLASS-350-255	c44 N80-14473	US-PATENT-CLASS-356-103	c14 N71-28994
US-PATENT-CLASS-350-296	c44 N79-24432	US-PATENT-CLASS-356-103	c36 N75-15028
US-PATENT-CLASS-350-296	c44 N80-14473	US-PATENT-CLASS-356-103	c74 N78-13874
US-PATENT-CLASS-350-299	c74 N74-21304	US-PATENT-CLASS-356-104	c16 N71-24074
US-PATENT-CLASS-350-299	c44 N76-24696	US-PATENT-CLASS-356-104	c74 N78-13874
US-PATENT-CLASS-350-299	c74 N77-28932	US-PATENT-CLASS-356-106	c14 N71-17627
US-PATENT-CLASS-350-299	c44 N78-10554	US-PATENT-CLASS-356-106	c14 N71-17655
US-PATENT-CLASS-350-299	c44 N78-31526	US-PATENT-CLASS-356-106	c14 N71-27215
US-PATENT-CLASS-350-299	c44 N79-11471	US-PATENT-CLASS-356-106	c14 N73-12446
US-PATENT-CLASS-350-299	c44 N79-24433	US-PATENT-CLASS-356-106	c35 N74-15146
US-PATENT-CLASS-350-301	c74 N81-17886	US-PATENT-CLASS-356-106LB	c36 N75-19653
US-PATENT-CLASS-350-310	c11 N69-24321	US-PATENT-CLASS-356-106B	c72 N74-19310
US-PATENT-CLASS-350-310	c23 N71-24688	US-PATENT-CLASS-356-106B	c36 N76-14447
US-PATENT-CLASS-350-310	c23 N71-29123	US-PATENT-CLASS-356-106B	c35 N77-10493
US-PATENT-CLASS-350-310	c23 N71-33229	US-PATENT-CLASS-356-106B	c47 N77-10753
US-PATENT-CLASS-350-310	c23 N72-22673	US-PATENT-CLASS-356-106S	c23 N73-13661
US-PATENT-CLASS-350-310	c74 N77-28933	US-PATENT-CLASS-356-106S	c35 N76-31490
US-PATENT-CLASS-350-311	c74 N75-25706	US-PATENT-CLASS-356-106S	c35 N78-18391
US-PATENT-CLASS-350-312	c16 N72-12440	US-PATENT-CLASS-356-107	c16 N71-24170
US-PATENT-CLASS-350-320	c74 N77-28933	US-PATENT-CLASS-356-108	c26 N73-26751
US-PATENT-CLASS-350-320	c44 N77-32583	US-PATENT-CLASS-356-108	c16 N73-30476
US-PATENT-CLASS-350-320	c73 N78-32848	US-PATENT-CLASS-356-109	c16 N73-30476
US-PATENT-CLASS-350-320	c44 N75-14529	US-PATENT-CLASS-356-110	c14 N73-25463
US-PATENT-CLASS-350-359	c36 N80-16321	US-PATENT-CLASS-356-110	c35 N78-18391
US-PATENT-CLASS-350-370	c35 N81-33448	US-PATENT-CLASS-356-112	c72 N74-19310
US-PATENT-CLASS-351-23	c05 N73-26072	US-PATENT-CLASS-356-113	c14 N72-17323
US-PATENT-CLASS-351-23	c52 N76-30793	US-PATENT-CLASS-356-113	c35 N74-23040
US-PATENT-CLASS-351-30	c05 N73-26072	US-PATENT-CLASS-356-114	c14 N73-12446
US-PATENT-CLASS-351-30	c52 N76-30793	US-PATENT-CLASS-356-114	c35 N76-31490
US-PATENT-CLASS-351-36	c05 N73-26072	US-PATENT-CLASS-356-117	c23 N71-16101
US-PATENT-CLASS-351-36	c52 N76-30793	US-PATENT-CLASS-356-120	c74 N78-27904
US-PATENT-CLASS-351-38	c54 N75-27759	US-PATENT-CLASS-356-123	c74 N76-19935

US-PATENT-CLASS-356-124	.....	c74 N76-19935	US-PATENT-CLASS-356-346	.....	c74 N81-29963
US-PATENT-CLASS-356-124	.....	c74 N79-11865	US-PATENT-CLASS-356-350	.....	c35 N81-33448
US-PATENT-CLASS-356-129	.....	c74 N79-20656	US-PATENT-CLASS-356-351	.....	c35 N81-33448
US-PATENT-CLASS-356-138	.....	c14 N72-20379	US-PATENT-CLASS-356-352	.....	c74 N81-17888
US-PATENT-CLASS-356-138	.....	c16 N73-33397	US-PATENT-CLASS-356-356	.....	c36 N81-24422
US-PATENT-CLASS-356-141	.....	c14 N72-27409	US-PATENT-CLASS-356-358	.....	c74 N81-17888
US-PATENT-CLASS-356-141	.....	c14 N73-28490	US-PATENT-CLASS-356-358	.....	c36 N81-24422
US-PATENT-CLASS-356-141	.....	c36 N74-21091	US-PATENT-CLASS-356-369	.....	c35 N80-28687
US-PATENT-CLASS-356-141	.....	c89 N74-30886	US-PATENT-CLASS-356-404	.....	c35 N79-28527
US-PATENT-CLASS-356-141	.....	c74 N77-22951	US-PATENT-CLASS-356-406	.....	c52 N81-27783
US-PATENT-CLASS-356-147	.....	c89 N74-30886	US-PATENT-CLASS-356-407	.....	c43 N79-17288
US-PATENT-CLASS-356-148	.....	c16 N73-33397	US-PATENT-CLASS-356-407	.....	c52 N81-27783
US-PATENT-CLASS-356-150	.....	c15 N71-28740	US-PATENT-CLASS-356-416	.....	c43 N79-17288
US-PATENT-CLASS-356-150	.....	c74 N80-21138	US-PATENT-CLASS-356-416	.....	c52 N81-27783
US-PATENT-CLASS-356-152	.....	c15 N71-28740	US-PATENT-CLASS-356-432	.....	c74 N81-17887
US-PATENT-CLASS-356-152	.....	c16 N72-13437	US-PATENT-CLASS-356-432	.....	c25 N81-25159
US-PATENT-CLASS-356-152	.....	c14 N72-20379	US-PATENT-CLASS-356-437	.....	c25 N81-14015
US-PATENT-CLASS-356-152	.....	c14 N72-27409	US-PATENT-CLASS-356-1065	.....	c35 N74-23040
US-PATENT-CLASS-356-152	.....	c14 N73-25462	US-PATENT-CLASS-357-4	.....	c33 N78-13320
US-PATENT-CLASS-356-152	.....	c36 N74-15145	US-PATENT-CLASS-357-5	.....	c33 N75-31332
US-PATENT-CLASS-356-152	.....	c36 N74-21091	US-PATENT-CLASS-357-5	.....	c33 N78-13320
US-PATENT-CLASS-356-152	.....	c74 N74-21304	US-PATENT-CLASS-357-7	.....	c33 N75-31331
US-PATENT-CLASS-356-152	.....	c74 N77-22951	US-PATENT-CLASS-357-15	.....	c44 N78-13526
US-PATENT-CLASS-356-152	.....	c74 N80-21138	US-PATENT-CLASS-357-15	.....	c44 N79-11467
US-PATENT-CLASS-356-152	.....	c37 N81-27519	US-PATENT-CLASS-357-15	.....	c44 N81-29525
US-PATENT-CLASS-356-153	.....	c15 N71-28740	US-PATENT-CLASS-357-16	.....	c44 N78-13526
US-PATENT-CLASS-356-153	.....	c23 N71-29125	US-PATENT-CLASS-357-16	.....	c44 N79-11467
US-PATENT-CLASS-356-153	.....	c16 N73-33397	US-PATENT-CLASS-357-22	.....	c33 N79-11314
US-PATENT-CLASS-356-153	.....	c18 N76-14186	US-PATENT-CLASS-357-22	.....	c33 N79-12321
US-PATENT-CLASS-356-154	.....	c15 N71-26673	US-PATENT-CLASS-357-23	.....	c76 N75-25730
US-PATENT-CLASS-356-159	.....	c36 N78-14380	US-PATENT-CLASS-357-23	.....	c33 N79-12321
US-PATENT-CLASS-356-160	.....	c36 N76-14380	US-PATENT-CLASS-357-23	.....	c33 N81-26360
US-PATENT-CLASS-356-161	.....	c26 N73-26751	US-PATENT-CLASS-357-24	.....	c33 N75-31331
US-PATENT-CLASS-356-162	.....	c66 N76-19888	US-PATENT-CLASS-357-29	.....	c76 N75-25730
US-PATENT-CLASS-356-165	.....	c38 N78-17396	US-PATENT-CLASS-357-30	.....	c44 N76-28635
US-PATENT-CLASS-356-166	.....	c14 N71-23175	US-PATENT-CLASS-357-30	.....	c44 N78-13526
US-PATENT-CLASS-356-167	.....	c14 N72-11364	US-PATENT-CLASS-357-30	.....	c44 N78-24609
US-PATENT-CLASS-356-167	.....	c66 N76-19888	US-PATENT-CLASS-357-30	.....	c44 N78-25527
US-PATENT-CLASS-356-167	.....	c74 N78-27904	US-PATENT-CLASS-357-30	.....	c44 N79-11467
US-PATENT-CLASS-356-169	.....	c60 N78-10709	US-PATENT-CLASS-357-30	.....	c44 N79-14528
US-PATENT-CLASS-356-171	.....	c74 N77-22950	US-PATENT-CLASS-357-30	.....	c44 N79-31752
US-PATENT-CLASS-356-172	.....	c16 N73-33397	US-PATENT-CLASS-357-30	.....	c44 N80-29835
US-PATENT-CLASS-356-172	.....	c36 N74-21091	US-PATENT-CLASS-357-30	.....	c44 N81-19558
US-PATENT-CLASS-356-172	.....	c74 N77-22951	US-PATENT-CLASS-357-30	.....	c44 N81-29525
US-PATENT-CLASS-356-180	.....	c35 N74-27860	US-PATENT-CLASS-357-41	.....	c33 N79-12321
US-PATENT-CLASS-356-186	.....	c35 N75-19613	US-PATENT-CLASS-357-42	.....	c76 N75-25730
US-PATENT-CLASS-356-189	.....	c35 N75-19613	US-PATENT-CLASS-357-45	.....	c33 N79-12321
US-PATENT-CLASS-356-197	.....	c37 N74-18123	US-PATENT-CLASS-357-45	.....	c44 N79-26475
US-PATENT-CLASS-356-199	.....	c36 N78-14380	US-PATENT-CLASS-357-52	.....	c76 N75-25730
US-PATENT-CLASS-356-201	.....	c75 N74-30156	US-PATENT-CLASS-357-52	.....	c44 N80-29835
US-PATENT-CLASS-356-201	.....	c35 N77-14411	US-PATENT-CLASS-357-54	.....	c76 N75-25730
US-PATENT-CLASS-356-202	.....	c26 N73-26751	US-PATENT-CLASS-357-55	.....	c33 N79-12321
US-PATENT-CLASS-356-203	.....	c14 N71-26788	US-PATENT-CLASS-357-55	.....	c33 N81-26360
US-PATENT-CLASS-356-204	.....	c35 N77-14411	US-PATENT-CLASS-357-59	.....	c44 N76-28635
US-PATENT-CLASS-356-204	.....	c74 N78-17867	US-PATENT-CLASS-357-59	.....	c44 N78-24609
US-PATENT-CLASS-356-207	.....	c45 N76-17656	US-PATENT-CLASS-357-59	.....	c44 N81-19558
US-PATENT-CLASS-356-208	.....	c74 N78-33513	US-PATENT-CLASS-357-60	.....	c33 N81-26360
US-PATENT-CLASS-356-209	.....	c23 N71-16341	US-PATENT-CLASS-357-63	.....	c33 N76-31409
US-PATENT-CLASS-356-209	.....	c14 N71-28993	US-PATENT-CLASS-357-63	.....	c44 N81-19558
US-PATENT-CLASS-356-209	.....	c14 N72-17323	US-PATENT-CLASS-357-65	.....	c44 N78-25527
US-PATENT-CLASS-356-209	.....	c35 N76-31490	US-PATENT-CLASS-357-65	.....	c44 N79-11467
US-PATENT-CLASS-356-210	.....	c74 N79-11665	US-PATENT-CLASS-357-65	.....	c44 N79-31752
US-PATENT-CLASS-356-212	.....	c35 N77-31465	US-PATENT-CLASS-357-67	.....	c44 N78-25527
US-PATENT-CLASS-356-213	.....	c39 N81-25400	US-PATENT-CLASS-357-67	.....	c44 N79-11467
US-PATENT-CLASS-356-216	.....	c74 N74-15095	US-PATENT-CLASS-357-67	.....	c44 N79-31752
US-PATENT-CLASS-356-216	.....	c35 N80-18359	US-PATENT-CLASS-357-73	.....	c33 N78-13320
US-PATENT-CLASS-356-216	.....	c39 N81-25400	US-PATENT-CLASS-357-74	.....	c37 N79-28549
US-PATENT-CLASS-356-222	.....	c03 N72-20033	US-PATENT-CLASS-357-79	.....	c37 N79-28549
US-PATENT-CLASS-356-234	.....	c39 N81-25400	US-PATENT-CLASS-357-81	.....	c37 N79-28549
US-PATENT-CLASS-356-236	.....	c74 N77-21941	US-PATENT-CLASS-357-82	.....	c37 N79-28549
US-PATENT-CLASS-356-237	.....	c74 N77-10899	US-PATENT-CLASS-357-83	.....	c37 N79-28549
US-PATENT-CLASS-356-237	.....	c38 N78-17395	US-PATENT-CLASS-357-91	.....	c76 N75-25730
US-PATENT-CLASS-356-237	.....	c38 N78-17396	US-PATENT-CLASS-357-91	.....	c33 N78-27326
US-PATENT-CLASS-356-237	.....	c35 N79-28527	US-PATENT-CLASS-357-91	.....	c44 N80-29835
US-PATENT-CLASS-356-239	.....	c74 N77-10899	US-PATENT-CLASS-357-91	.....	c33 N81-26360
US-PATENT-CLASS-356-241	.....	c14 N72-32452	US-PATENT-CLASS-358-36	.....	c32 N75-21485
US-PATENT-CLASS-356-243	.....	c36 N80-16321	US-PATENT-CLASS-358-41	.....	c74 N78-17865
US-PATENT-CLASS-356-244	.....	c14 N72-17323	US-PATENT-CLASS-358-44	.....	c74 N77-18893
US-PATENT-CLASS-356-244	.....	c35 N76-31490	US-PATENT-CLASS-358-55	.....	c74 N78-17865
US-PATENT-CLASS-356-244	.....	c35 N80-28667	US-PATENT-CLASS-358-81	.....	c32 N79-20297
US-PATENT-CLASS-356-246	.....	c35 N74-27860	US-PATENT-CLASS-358-96	.....	c52 N79-10724
US-PATENT-CLASS-356-246	.....	c74 N78-17867	US-PATENT-CLASS-358-104	.....	c09 N78-18083
US-PATENT-CLASS-356-248	.....	c14 N72-22444	US-PATENT-CLASS-358-104	.....	c74 N79-13855
US-PATENT-CLASS-356-300	.....	c43 N79-17288	US-PATENT-CLASS-358-106	.....	c39 N78-16387
US-PATENT-CLASS-356-328	.....	c35 N80-26635	US-PATENT-CLASS-358-107	.....	c35 N79-18296
US-PATENT-CLASS-356-334	.....	c74 N80-21140	US-PATENT-CLASS-358-109	.....	c32 N79-20297
US-PATENT-CLASS-356-345	.....	c74 N81-17888	US-PATENT-CLASS-358-109	.....	c33 N81-33403
US-PATENT-CLASS-356-345	.....	c74 N81-29963	US-PATENT-CLASS-358-111	.....	c52 N79-10724
US-PATENT-CLASS-356-346	.....	c35 N80-20563	US-PATENT-CLASS-358-133	.....	c32 N77-24328

US-PATENT-CLASS-358-138	c32 N77-24328	US-PATENT-CLASS-375-107	c32 N81-14186
US-PATENT-CLASS-358-142	c74 N78-14889	US-PATENT-CLASS-375-115	c32 N81-15179
US-PATENT-CLASS-358-213	c33 N81-33403	US-PATENT-CLASS-403-28	c27 N76-14264
US-PATENT-CLASS-358-225	c74 N78-17865	US-PATENT-CLASS-403-105	c37 N79-14382
US-PATENT-CLASS-360-9	c35 N76-16391	US-PATENT-CLASS-403-171	c31 N81-25258
US-PATENT-CLASS-360-10	c35 N76-16391	US-PATENT-CLASS-403-179	c27 N76-14264
US-PATENT-CLASS-360-25	c35 N77-17426	US-PATENT-CLASS-403-273	c37 N77-23482
US-PATENT-CLASS-360-26	c33 N76-18353	US-PATENT-CLASS-405-229	c44 N79-24432
US-PATENT-CLASS-360-31	c35 N77-17426	US-PATENT-CLASS-405-263	c44 N79-24432
US-PATENT-CLASS-360-35	c35 N76-16391	US-PATENT-CLASS-407-85	c37 N81-14319
US-PATENT-CLASS-360-51	c33 N76-18353	US-PATENT-CLASS-407-117	c37 N81-14319
US-PATENT-CLASS-360-101	c35 N76-16391	US-PATENT-CLASS-408-1R	c37 N81-14319
US-PATENT-CLASS-361-56	c33 N81-27397	US-PATENT-CLASS-408-80	c37 N74-25968
US-PATENT-CLASS-361-91	c33 N81-27397	US-PATENT-CLASS-408-111	c37 N74-25968
US-PATENT-CLASS-361-170	c33 N79-28415	US-PATENT-CLASS-408-112	c37 N75-25186
US-PATENT-CLASS-361-334	c35 N81-26431	US-PATENT-CLASS-408-137	c15 N71-33518
US-PATENT-CLASS-361-395	c32 N78-24391	US-PATENT-CLASS-408-186	c37 N75-25186
US-PATENT-CLASS-362-11	c74 N81-17886	US-PATENT-CLASS-408-193	c37 N75-25186
US-PATENT-CLASS-362-241	c74 N81-17886	US-PATENT-CLASS-408-195	c37 N75-25186
US-PATENT-CLASS-362-269	c17 N78-17140	US-PATENT-CLASS-414-1	c37 N80-14398
US-PATENT-CLASS-363-16	c33 N78-32341	US-PATENT-CLASS-414-1	c37 N81-14320
US-PATENT-CLASS-363-21	c33 N81-19392	US-PATENT-CLASS-414-4	c37 N79-28551
US-PATENT-CLASS-363-21	c33 N81-19393	US-PATENT-CLASS-414-4	c54 N81-26718
US-PATENT-CLASS-363-24	c33 N81-33404	US-PATENT-CLASS-414-6	c54 N79-24652
US-PATENT-CLASS-363-27	c44 N81-12542	US-PATENT-CLASS-414-730	c37 N81-27519
US-PATENT-CLASS-363-36	c33 N81-19393	US-PATENT-CLASS-414-735	c54 N81-26718
US-PATENT-CLASS-363-40	c33 N81-19393	US-PATENT-CLASS-414-744A	c54 N81-26718
US-PATENT-CLASS-363-47	c33 N81-19393	US-PATENT-CLASS-415-1	c34 N79-20335
US-PATENT-CLASS-363-53	c33 N77-30365	US-PATENT-CLASS-415-2	c44 N80-21828
US-PATENT-CLASS-363-56	c33 N79-24254	US-PATENT-CLASS-415-9	c44 N79-14527
US-PATENT-CLASS-363-56	c33 N81-14220	US-PATENT-CLASS-415-101	c44 N80-21828
US-PATENT-CLASS-363-56	c33 N81-33404	US-PATENT-CLASS-415-115	c07 N79-10057
US-PATENT-CLASS-363-57	c33 N78-10377	US-PATENT-CLASS-415-116	c07 N79-10057
US-PATENT-CLASS-363-60	c33 N78-32341	US-PATENT-CLASS-415-143	c34 N79-20335
US-PATENT-CLASS-363-60	c44 N81-12542	US-PATENT-CLASS-415-145	c07 N77-28118
US-PATENT-CLASS-363-70	c33 N77-30365	US-PATENT-CLASS-415-174	c37 N79-18318
US-PATENT-CLASS-363-71	c33 N79-24254	US-PATENT-CLASS-415-174	c37 N80-26658
US-PATENT-CLASS-363-71	c33 N79-24257	US-PATENT-CLASS-415-180	c07 N77-23106
US-PATENT-CLASS-363-71	c33 N81-14220	US-PATENT-CLASS-415-180	c37 N78-10467
US-PATENT-CLASS-363-78	c33 N81-14220	US-PATENT-CLASS-415-181	c07 N74-28226
US-PATENT-CLASS-363-89	c33 N78-10377	US-PATENT-CLASS-415-181	c07 N74-31270
US-PATENT-CLASS-363-95	c33 N79-24257	US-PATENT-CLASS-415-196	c37 N80-26658
US-PATENT-CLASS-363-97	c33 N79-24254	US-PATENT-CLASS-415-199	c05 N80-14107
US-PATENT-CLASS-363-101	c33 N78-32341	US-PATENT-CLASS-415-200	c07 N79-14096
US-PATENT-CLASS-363-101	c33 N81-19392	US-PATENT-CLASS-415-200	c37 N79-18318
US-PATENT-CLASS-363-134	c33 N79-24257	US-PATENT-CLASS-415-201	c07 N79-14096
US-PATENT-CLASS-363-147	c44 N81-12542	US-PATENT-CLASS-416-2	c44 N79-14527
US-PATENT-CLASS-364-106	c67 N81-19115	US-PATENT-CLASS-416-25	c05 N75-12930
US-PATENT-CLASS-364-120	c52 N79-12694	US-PATENT-CLASS-416-51	c05 N79-17847
US-PATENT-CLASS-364-200	c62 N81-24779	US-PATENT-CLASS-416-61	c35 N78-24515
US-PATENT-CLASS-364-200	c60 N81-27814	US-PATENT-CLASS-416-61	c37 N79-14382
US-PATENT-CLASS-364-300	c52 N79-12694	US-PATENT-CLASS-416-88	c05 N79-17847
US-PATENT-CLASS-364-415	c52 N79-12694	US-PATENT-CLASS-416-89	c05 N79-17847
US-PATENT-CLASS-364-417	c52 N79-10724	US-PATENT-CLASS-416-104	c05 N77-17029
US-PATENT-CLASS-364-431	c07 N81-19115	US-PATENT-CLASS-416-114	c05 N81-19087
US-PATENT-CLASS-364-434	c08 N79-23697	US-PATENT-CLASS-416-115	c02 N72-11018
US-PATENT-CLASS-364-434	c08 N81-24106	US-PATENT-CLASS-416-121	c02 N72-11018
US-PATENT-CLASS-364-453	c18 N81-29152	US-PATENT-CLASS-416-127	c02 N72-11018
US-PATENT-CLASS-364-458	c32 N79-14267	US-PATENT-CLASS-416-130	c02 N72-11018
US-PATENT-CLASS-364-510	c34 N81-26402	US-PATENT-CLASS-416-132R	c05 N79-17847
US-PATENT-CLASS-364-514	c33 N81-33405	US-PATENT-CLASS-416-135	c07 N77-32148
US-PATENT-CLASS-364-560	c43 N79-26439	US-PATENT-CLASS-416-135	c37 N78-10468
US-PATENT-CLASS-364-566	c18 N81-29152	US-PATENT-CLASS-416-138	c05 N77-17029
US-PATENT-CLASS-364-571	c34 N81-26402	US-PATENT-CLASS-416-138	c05 N79-17847
US-PATENT-CLASS-364-604	c32 N79-14267	US-PATENT-CLASS-416-141	c05 N77-17029
US-PATENT-CLASS-364-713	c32 N79-20297	US-PATENT-CLASS-416-141	c37 N78-10468
US-PATENT-CLASS-364-728	c32 N79-14267	US-PATENT-CLASS-416-144	c35 N78-24515
US-PATENT-CLASS-364-900	c52 N79-12694	US-PATENT-CLASS-416-149	c02 N72-11018
US-PATENT-CLASS-364-900	c60 N79-20751	US-PATENT-CLASS-416-153	c07 N77-14025
US-PATENT-CLASS-364-900	c60 N81-27814	US-PATENT-CLASS-416-157B	c07 N79-14095
US-PATENT-CLASS-365-120	c33 N81-29342	US-PATENT-CLASS-416-160	c07 N77-14025
US-PATENT-CLASS-367-26	c39 N80-10507	US-PATENT-CLASS-416-160	c07 N79-14095
US-PATENT-CLASS-367-27	c31 N80-32584	US-PATENT-CLASS-416-162	c07 N77-14025
US-PATENT-CLASS-367-36	c31 N80-32584	US-PATENT-CLASS-416-162	c07 N79-14095
US-PATENT-CLASS-367-57	c31 N80-32584	US-PATENT-CLASS-416-165	c07 N77-14025
US-PATENT-CLASS-368-47	c33 N81-14221	US-PATENT-CLASS-416-167	c07 N77-14025
US-PATENT-CLASS-370-58	c60 N81-27814	US-PATENT-CLASS-416-167	c07 N79-14095
US-PATENT-CLASS-370-85	c33 N81-14221	US-PATENT-CLASS-416-190	c07 N77-32148
US-PATENT-CLASS-371-20	c33 N81-26359	US-PATENT-CLASS-416-193A	c07 N77-32148
US-PATENT-CLASS-371-25	c33 N81-26359	US-PATENT-CLASS-416-200	c02 N72-11018
US-PATENT-CLASS-375-1	c32 N81-15179	US-PATENT-CLASS-416-214A	c07 N78-33101
US-PATENT-CLASS-375-1	c35 N81-19427	US-PATENT-CLASS-416-220R	c07 N77-27116
US-PATENT-CLASS-375-1	c33 N81-33405	US-PATENT-CLASS-416-220R	c37 N78-10468
US-PATENT-CLASS-375-34	c35 N81-19427	US-PATENT-CLASS-416-221	c07 N77-27116
US-PATENT-CLASS-375-54	c33 N81-15192	US-PATENT-CLASS-416-223	c07 N74-28226
US-PATENT-CLASS-375-58	c32 N81-15179	US-PATENT-CLASS-416-224	c24 N77-19170
US-PATENT-CLASS-375-67	c33 N81-15192	US-PATENT-CLASS-416-228	c05 N80-14107
US-PATENT-CLASS-375-99	c35 N81-19427	US-PATENT-CLASS-416-230	c24 N77-19170
US-PATENT-CLASS-375-104	c35 N81-19427	US-PATENT-CLASS-416-237	c07 N74-28226

US-PATENT-CLASS-416-238	c05 N80-14107	US-PATENT-CLASS-425-113	c15 N73-13464
US-PATENT-CLASS-416-241A	c07 N77-32148	US-PATENT-CLASS-425-128	c31 N74-32920
US-PATENT-CLASS-416-244A	c07 N78-33101	US-PATENT-CLASS-425-133	c15 N73-13464
US-PATENT-CLASS-416-248	c37 N78-10468	US-PATENT-CLASS-425-176	c15 N73-13464
US-PATENT-CLASS-416-500	c05 N81-19087	US-PATENT-CLASS-425-378R	c31 N81-15154
US-PATENT-CLASS-417-36	c35 N75-19611	US-PATENT-CLASS-425-405R	c31 N75-13111
US-PATENT-CLASS-417-50	c15 N71-27084	US-PATENT-CLASS-425-415	c31 N74-32920
US-PATENT-CLASS-417-52	c37 N74-27904	US-PATENT-CLASS-425-438	c31 N75-13111
US-PATENT-CLASS-417-88	c44 N78-32539	US-PATENT-CLASS-425-468	c31 N75-13111
US-PATENT-CLASS-417-138	c35 N75-19611	US-PATENT-CLASS-427-4	c51 N77-27677
US-PATENT-CLASS-417-141	c44 N76-29701	US-PATENT-CLASS-427-34	c34 N78-18355
US-PATENT-CLASS-417-152	c15 N72-22489	US-PATENT-CLASS-427-34	c24 N79-17916
US-PATENT-CLASS-417-207	c44 N76-29701	US-PATENT-CLASS-427-38	c74 N78-32854
US-PATENT-CLASS-417-209	c34 N76-17317	US-PATENT-CLASS-427-38	c27 N80-24437
US-PATENT-CLASS-417-209	c44 N76-29701	US-PATENT-CLASS-427-40	c27 N78-31233
US-PATENT-CLASS-417-225	c35 N78-10428	US-PATENT-CLASS-427-40	c27 N79-18052
US-PATENT-CLASS-417-379	c44 N76-29701	US-PATENT-CLASS-427-40	c27 N80-24437
US-PATENT-CLASS-417-383	c37 N80-31790	US-PATENT-CLASS-427-41	c27 N78-31233
US-PATENT-CLASS-417-391	c15 N73-24513	US-PATENT-CLASS-427-41	c74 N78-32854
US-PATENT-CLASS-417-395	c35 N75-19611	US-PATENT-CLASS-427-41	c27 N79-14214
US-PATENT-CLASS-417-470	c35 N74-15126	US-PATENT-CLASS-427-41	c27 N79-18052
US-PATENT-CLASS-417-471	c35 N74-15126	US-PATENT-CLASS-427-41	c27 N80-23452
US-PATENT-CLASS-422-3	c54 N81-24724	US-PATENT-CLASS-427-44	c74 N78-32854
US-PATENT-CLASS-422-9	c45 N80-14579	US-PATENT-CLASS-427-44	c27 N80-32516
US-PATENT-CLASS-422-27	c54 N81-24724	US-PATENT-CLASS-427-47	c44 N77-32583
US-PATENT-CLASS-422-30	c54 N81-24724	US-PATENT-CLASS-427-75	c44 N78-25527
US-PATENT-CLASS-422-34	c54 N81-24724	US-PATENT-CLASS-427-75	c44 N79-11468
US-PATENT-CLASS-422-41	c52 N79-14749	US-PATENT-CLASS-427-75	c44 N79-11472
US-PATENT-CLASS-422-48	c52 N79-14749	US-PATENT-CLASS-427-84	c44 N79-11472
US-PATENT-CLASS-422-52	c51 N80-16714	US-PATENT-CLASS-427-86	c44 N76-28635
US-PATENT-CLASS-422-68	c51 N80-27067	US-PATENT-CLASS-427-86	c44 N78-24609
US-PATENT-CLASS-422-109	c54 N81-24724	US-PATENT-CLASS-427-88	c44 N79-31752
US-PATENT-CLASS-422-167	c37 N80-10494	US-PATENT-CLASS-427-95	c25 N79-28253
US-PATENT-CLASS-422-199	c37 N80-10494	US-PATENT-CLASS-427-113	c44 N76-28635
US-PATENT-CLASS-422-208	c37 N80-10494	US-PATENT-CLASS-427-113	c44 N78-24609
US-PATENT-CLASS-422-224	c31 N80-18231	US-PATENT-CLASS-427-123	c44 N79-11472
US-PATENT-CLASS-422-235	c37 N80-10494	US-PATENT-CLASS-427-124	c37 N78-13436
US-PATENT-CLASS-422-242	c37 N80-10494	US-PATENT-CLASS-427-126	c37 N78-13436
US-PATENT-CLASS-422-246	c76 N80-32244	US-PATENT-CLASS-427-126	c44 N79-11472
US-PATENT-CLASS-422-246	c33 N81-19389	US-PATENT-CLASS-427-130	c44 N77-32583
US-PATENT-CLASS-422-249	c33 N81-19389	US-PATENT-CLASS-427-160	c34 N77-18382
US-PATENT-CLASS-423-1	c28 N81-15119	US-PATENT-CLASS-427-160	c44 N78-19599
US-PATENT-CLASS-423-35	c25 N79-28253	US-PATENT-CLASS-427-162	c12 N76-15189
US-PATENT-CLASS-423-131	c28 N81-15119	US-PATENT-CLASS-427-164	c27 N78-14164
US-PATENT-CLASS-423-149	c26 N80-14229	US-PATENT-CLASS-427-164	c27 N78-31233
US-PATENT-CLASS-423-231	c25 N74-12813	US-PATENT-CLASS-427-164	c74 N78-32854
US-PATENT-CLASS-423-242	c45 N79-12584	US-PATENT-CLASS-427-164	c27 N80-24437
US-PATENT-CLASS-423-249	c25 N76-27383	US-PATENT-CLASS-427-196	c27 N76-15310
US-PATENT-CLASS-423-293	c26 N80-14229	US-PATENT-CLASS-427-203	c27 N76-16229
US-PATENT-CLASS-423-345	c76 N76-25049	US-PATENT-CLASS-427-204	c27 N76-16229
US-PATENT-CLASS-423-345	c76 N79-23798	US-PATENT-CLASS-427-205	c27 N76-16229
US-PATENT-CLASS-423-346	c76 N76-25049	US-PATENT-CLASS-427-215	c27 N78-32260
US-PATENT-CLASS-423-348	c26 N80-14229	US-PATENT-CLASS-427-221	c27 N81-19296
US-PATENT-CLASS-423-350	c37 N80-10494	US-PATENT-CLASS-427-229	c25 N78-10225
US-PATENT-CLASS-423-350	c31 N80-18231	US-PATENT-CLASS-427-230	c37 N76-31524
US-PATENT-CLASS-423-352	c36 N76-18427	US-PATENT-CLASS-427-240	c37 N81-33482
US-PATENT-CLASS-423-407	c24 N76-14203	US-PATENT-CLASS-427-245	c27 N80-23452
US-PATENT-CLASS-423-417	c26 N80-14229	US-PATENT-CLASS-427-248	c44 N76-28635
US-PATENT-CLASS-423-446	c15 N73-19457	US-PATENT-CLASS-427-248E	c37 N78-13436
US-PATENT-CLASS-423-579	c46 N74-13011	US-PATENT-CLASS-427-248J	c44 N78-24609
US-PATENT-CLASS-423-581	c25 N79-10162	US-PATENT-CLASS-427-249	c44 N76-28635
US-PATENT-CLASS-423-582	c26 N78-32229	US-PATENT-CLASS-427-249	c44 N78-24609
US-PATENT-CLASS-423-583	c26 N78-32229	US-PATENT-CLASS-427-250	c12 N76-15189
US-PATENT-CLASS-423-625	c15 N73-19457	US-PATENT-CLASS-427-250	c44 N76-28635
US-PATENT-CLASS-423-625	c26 N80-14229	US-PATENT-CLASS-427-250	c37 N78-13436
US-PATENT-CLASS-423-644	c36 N76-18427	US-PATENT-CLASS-427-255	c37 N78-13436
US-PATENT-CLASS-423-648R	c44 N77-22607	US-PATENT-CLASS-427-261	c44 N78-25527
US-PATENT-CLASS-423-648R	c28 N78-24365	US-PATENT-CLASS-427-261	c44 N79-11472
US-PATENT-CLASS-423-648R	c28 N80-20402	US-PATENT-CLASS-427-270	c27 N76-16229
US-PATENT-CLASS-423-650	c28 N81-14103	US-PATENT-CLASS-427-275	c27 N76-16229
US-PATENT-CLASS-423-650	c44 N76-18642	US-PATENT-CLASS-427-287	c27 N76-16229
US-PATENT-CLASS-423-650	c44 N76-29700	US-PATENT-CLASS-427-292	c24 N79-17916
US-PATENT-CLASS-423-650	c44 N76-29704	US-PATENT-CLASS-427-294	c27 N79-14214
US-PATENT-CLASS-423-650	c44 N77-10636	US-PATENT-CLASS-427-302	c74 N78-32854
US-PATENT-CLASS-423-650	c28 N80-10374	US-PATENT-CLASS-427-322	c34 N77-18382
US-PATENT-CLASS-423-658.5	c28 N81-15119	US-PATENT-CLASS-427-322	c74 N78-32854
US-PATENT-CLASS-424-3	c51 N77-27677	US-PATENT-CLASS-427-327	c24 N79-17916
US-PATENT-CLASS-424-12	c25 N79-14169	US-PATENT-CLASS-427-328	c24 N79-17916
US-PATENT-CLASS-424-12	c51 N80-16715	US-PATENT-CLASS-427-343	c44 N79-11472
US-PATENT-CLASS-424-180	c52 N75-15270	US-PATENT-CLASS-427-350	c24 N79-25142
US-PATENT-CLASS-424-247	c52 N81-29764	US-PATENT-CLASS-427-355	c24 N79-17916
US-PATENT-CLASS-424-267	c52 N81-29764	US-PATENT-CLASS-427-372A	c24 N79-25142
US-PATENT-CLASS-424-274	c52 N81-14613	US-PATENT-CLASS-427-376	c27 N76-22377
US-PATENT-CLASS-424-274	c52 N81-29764	US-PATENT-CLASS-427-376	c27 N76-23426
US-PATENT-CLASS-425-DIG.43	c31 N75-13111	US-PATENT-CLASS-427-376A	c27 N78-32260
US-PATENT-CLASS-425-6	c31 N81-33319	US-PATENT-CLASS-427-376B	c27 N78-32260
US-PATENT-CLASS-425-28B	c31 N74-32917	US-PATENT-CLASS-427-376B	c24 N79-17916
US-PATENT-CLASS-425-35	c31 N74-32917	US-PATENT-CLASS-427-376C	c24 N79-17916
US-PATENT-CLASS-425-77	c15 N72-20446	US-PATENT-CLASS-427-379	c27 N76-22377

US-PATENT-CLASS-427-379	.....	c27	N76-23426	US-PATENT-CLASS-428-408	.....	c27	N81-27272
US-PATENT-CLASS-427-379	.....	c27	N78-32260	US-PATENT-CLASS-428-411	.....	c27	N78-14164
US-PATENT-CLASS-427-379	.....	c27	N81-19296	US-PATENT-CLASS-428-411	.....	c27	N78-31233
US-PATENT-CLASS-427-380	.....	c27	N76-22377	US-PATENT-CLASS-428-411	.....	c27	N79-14214
US-PATENT-CLASS-427-380	.....	c27	N76-23426	US-PATENT-CLASS-428-412	.....	c27	N76-16230
US-PATENT-CLASS-427-380	.....	c27	N78-32260	US-PATENT-CLASS-428-412	.....	c27	N78-31233
US-PATENT-CLASS-427-385.5	.....	c27	N81-14078	US-PATENT-CLASS-428-412	.....	c74	N78-32854
US-PATENT-CLASS-427-385B	.....	c44	N78-25530	US-PATENT-CLASS-428-412	.....	c27	N79-18052
US-PATENT-CLASS-427-385C	.....	c44	N78-25530	US-PATENT-CLASS-428-413	.....	c27	N76-16230
US-PATENT-CLASS-427-386	.....	c24	N78-27180	US-PATENT-CLASS-428-413	.....	c15	N79-26100
US-PATENT-CLASS-427-387	.....	c74	N78-32854	US-PATENT-CLASS-428-413	.....	c24	N81-14000
US-PATENT-CLASS-427-388A	.....	c24	N78-27180	US-PATENT-CLASS-428-414	.....	c15	N79-26100
US-PATENT-CLASS-427-398A	.....	c44	N79-11472	US-PATENT-CLASS-428-416	.....	c27	N76-14264
US-PATENT-CLASS-427-399	.....	c44	N79-11472	US-PATENT-CLASS-428-418	.....	c24	N77-27188
US-PATENT-CLASS-427-402	.....	c27	N76-22377	US-PATENT-CLASS-428-418	.....	c15	N79-26100
US-PATENT-CLASS-427-402	.....	c27	N76-23426	US-PATENT-CLASS-428-421	.....	c34	N77-18382
US-PATENT-CLASS-427-405	.....	c34	N78-18355	US-PATENT-CLASS-428-421	.....	c15	N79-26100
US-PATENT-CLASS-427-419A	.....	c34	N78-18355	US-PATENT-CLASS-428-421	.....	c27	N80-24437
US-PATENT-CLASS-427-423	.....	c34	N78-18355	US-PATENT-CLASS-428-422	.....	c27	N78-31233
US-PATENT-CLASS-427-426	.....	c27	N76-15310	US-PATENT-CLASS-428-425	.....	c24	N77-28225
US-PATENT-CLASS-427-427	.....	c24	N78-24290	US-PATENT-CLASS-428-426	.....	c74	N78-15879
US-PATENT-CLASS-427-429	.....	c27	N81-14078	US-PATENT-CLASS-428-427	.....	c27	N78-32260
US-PATENT-CLASS-428-35	.....	c34	N77-18382	US-PATENT-CLASS-428-428	.....	c27	N76-22377
US-PATENT-CLASS-428-71	.....	c24	N78-15180	US-PATENT-CLASS-428-428	.....	c27	N76-23426
US-PATENT-CLASS-428-73	.....	c24	N78-10214	US-PATENT-CLASS-428-428	.....	c74	N78-15879
US-PATENT-CLASS-428-73	.....	c24	N78-15180	US-PATENT-CLASS-428-428	.....	c27	N78-32260
US-PATENT-CLASS-428-73	.....	c24	N79-16515	US-PATENT-CLASS-428-428	.....	c27	N78-32260
US-PATENT-CLASS-428-77	.....	c27	N76-14264	US-PATENT-CLASS-428-447	.....	c27	N76-14264
US-PATENT-CLASS-428-77	.....	c27	N79-12221	US-PATENT-CLASS-428-447	.....	c27	N76-16230
US-PATENT-CLASS-428-93	.....	c34	N78-25350	US-PATENT-CLASS-428-447	.....	c27	N78-31233
US-PATENT-CLASS-428-94	.....	c34	N78-25350	US-PATENT-CLASS-428-447	.....	c74	N78-32854
US-PATENT-CLASS-428-95	.....	c34	N78-25350	US-PATENT-CLASS-428-447	.....	c27	N79-12221
US-PATENT-CLASS-428-96	.....	c34	N78-25350	US-PATENT-CLASS-428-447	.....	c27	N79-18052
US-PATENT-CLASS-428-97	.....	c34	N78-25350	US-PATENT-CLASS-428-447	.....	c24	N79-25142
US-PATENT-CLASS-428-109	.....	c27	N76-14264	US-PATENT-CLASS-428-450	.....	c27	N76-16229
US-PATENT-CLASS-428-109	.....	c33	N79-12331	US-PATENT-CLASS-428-450	.....	c27	N76-22377
US-PATENT-CLASS-428-113	.....	c24	N81-14000	US-PATENT-CLASS-428-450	.....	c27	N76-23426
US-PATENT-CLASS-428-114	.....	c24	N81-13999	US-PATENT-CLASS-428-450	.....	c27	N79-12221
US-PATENT-CLASS-428-114	.....	c24	N81-14000	US-PATENT-CLASS-428-451	.....	c27	N79-18052
US-PATENT-CLASS-428-116	.....	c24	N78-10214	US-PATENT-CLASS-428-457	.....	c27	N76-16229
US-PATENT-CLASS-428-116	.....	c24	N78-17149	US-PATENT-CLASS-428-457	.....	c24	N77-27188
US-PATENT-CLASS-428-117	.....	c37	N76-24575	US-PATENT-CLASS-428-457	.....	c24	N77-28225
US-PATENT-CLASS-428-117	.....	c24	N78-15180	US-PATENT-CLASS-428-458	.....	c24	N77-28225
US-PATENT-CLASS-428-117	.....	c24	N79-16915	US-PATENT-CLASS-428-458	.....	c24	N79-16915
US-PATENT-CLASS-428-119	.....	c24	N79-16915	US-PATENT-CLASS-428-461	.....	c34	N77-18382
US-PATENT-CLASS-428-133	.....	c37	N79-10422	US-PATENT-CLASS-428-469	.....	c27	N76-16229
US-PATENT-CLASS-428-137	.....	c24	N79-25142	US-PATENT-CLASS-428-471	.....	c26	N81-25188
US-PATENT-CLASS-428-138	.....	c24	N78-10214	US-PATENT-CLASS-428-473.5	.....	c27	N81-14078
US-PATENT-CLASS-428-139	.....	c23	N81-29160	US-PATENT-CLASS-428-473.5	.....	c27	N81-29229
US-PATENT-CLASS-428-140	.....	c24	N81-14000	US-PATENT-CLASS-428-474	.....	c34	N77-18382
US-PATENT-CLASS-428-141	.....	c24	N77-28225	US-PATENT-CLASS-428-474	.....	c27	N79-33316
US-PATENT-CLASS-428-161	.....	c24	N77-28225	US-PATENT-CLASS-428-474	.....	c27	N80-24437
US-PATENT-CLASS-428-189	.....	c27	N79-12221	US-PATENT-CLASS-428-480	.....	c24	N81-14000
US-PATENT-CLASS-428-212	.....	c27	N76-14264	US-PATENT-CLASS-428-500	.....	c27	N80-32516
US-PATENT-CLASS-428-212	.....	c27	N79-12221	US-PATENT-CLASS-428-515	.....	c27	N78-31233
US-PATENT-CLASS-428-214	.....	c27	N76-14264	US-PATENT-CLASS-428-522	.....	c27	N78-14164
US-PATENT-CLASS-428-220	.....	c15	N79-26100	US-PATENT-CLASS-428-523	.....	c27	N78-31233
US-PATENT-CLASS-428-247	.....	c33	N79-12331	US-PATENT-CLASS-428-528	.....	c24	N81-13999
US-PATENT-CLASS-428-258	.....	c33	N79-12331	US-PATENT-CLASS-428-538	.....	c27	N76-22377
US-PATENT-CLASS-428-259	.....	c33	N79-12331	US-PATENT-CLASS-428-538	.....	c27	N76-23426
US-PATENT-CLASS-428-260	.....	c27	N81-27272	US-PATENT-CLASS-428-538	.....	c27	N78-31233
US-PATENT-CLASS-428-280	.....	c27	N79-12221	US-PATENT-CLASS-428-539	.....	c27	N76-16229
US-PATENT-CLASS-428-282	.....	c24	N79-25142	US-PATENT-CLASS-428-541	.....	c24	N81-13999
US-PATENT-CLASS-428-285	.....	c27	N79-12221	US-PATENT-CLASS-428-629	.....	c44	N80-16452
US-PATENT-CLASS-428-286	.....	c27	N79-12221	US-PATENT-CLASS-428-632	.....	c26	N81-25188
US-PATENT-CLASS-428-290	.....	c24	N78-15180	US-PATENT-CLASS-428-633	.....	c34	N78-18355
US-PATENT-CLASS-428-290	.....	c24	N79-25142	US-PATENT-CLASS-428-650	.....	c44	N80-16452
US-PATENT-CLASS-428-294	.....	c24	N78-17150	US-PATENT-CLASS-428-652	.....	c34	N78-18355
US-PATENT-CLASS-428-301	.....	c24	N77-27188	US-PATENT-CLASS-428-652	.....	c44	N78-19599
US-PATENT-CLASS-428-302	.....	c24	N78-17150	US-PATENT-CLASS-428-658	.....	c44	N80-16452
US-PATENT-CLASS-428-303	.....	c27	N76-15310	US-PATENT-CLASS-428-667	.....	c34	N78-18355
US-PATENT-CLASS-428-312	.....	c27	N78-32260	US-PATENT-CLASS-428-667	.....	c44	N78-19599
US-PATENT-CLASS-428-313	.....	c24	N78-27180	US-PATENT-CLASS-428-675	.....	c44	N80-16452
US-PATENT-CLASS-428-325	.....	c27	N78-32260	US-PATENT-CLASS-428-678	.....	c26	N81-25188
US-PATENT-CLASS-428-328	.....	c24	N77-27188	US-PATENT-CLASS-428-679	.....	c44	N78-19599
US-PATENT-CLASS-428-331	.....	c27	N78-32260	US-PATENT-CLASS-428-679	.....	c26	N81-25188
US-PATENT-CLASS-428-332	.....	c27	N76-22377	US-PATENT-CLASS-428-680	.....	c44	N80-16452
US-PATENT-CLASS-428-332	.....	c27	N76-23426	US-PATENT-CLASS-428-680	.....	c26	N81-25188
US-PATENT-CLASS-428-332	.....	c24	N78-27180	US-PATENT-CLASS-428-902	.....	c24	N77-27188
US-PATENT-CLASS-428-332	.....	c27	N79-12221	US-PATENT-CLASS-428-902	.....	c24	N78-10214
US-PATENT-CLASS-428-332	.....	c24	N79-25142	US-PATENT-CLASS-428-902	.....	c24	N78-17149
US-PATENT-CLASS-428-334	.....	c74	N78-15879	US-PATENT-CLASS-428-902	.....	c24	N81-14000
US-PATENT-CLASS-428-336	.....	c74	N78-15879	US-PATENT-CLASS-428-902	.....	c31	N81-25258
US-PATENT-CLASS-428-341	.....	c27	N78-32260	US-PATENT-CLASS-428-902	.....	c27	N81-27272
US-PATENT-CLASS-428-366	.....	c24	N79-24062	US-PATENT-CLASS-428-911	.....	c27	N76-16230
US-PATENT-CLASS-428-367	.....	c27	N81-27272	US-PATENT-CLASS-428-911	.....	c24	N77-27188
US-PATENT-CLASS-428-368	.....	c24	N77-27188	US-PATENT-CLASS-428-913	.....	c34	N78-25350
US-PATENT-CLASS-428-375	.....	c24	N79-16915	US-PATENT-CLASS-428-920	.....	c27	N76-16230
US-PATENT-CLASS-428-406	.....	c27	N78-32260	US-PATENT-CLASS-428-920	.....	c27	N76-22377

US-PATENT-CLASS-428-920	c27	N76-23426	US-PATENT-CLASS-455-619	c32	N81-14186
US-PATENT-CLASS-428-920	c24	N78-15180	US-PATENT-CLASS-467-28	c39	N80-10507
US-PATENT-CLASS-428-920	c27	N78-32260	US-PATENT-CLASS-474-205	c37	N80-32717
US-PATENT-CLASS-428-920	c27	N79-12221	US-PATENT-CLASS-521-27	c27	N81-14076
US-PATENT-CLASS-428-920	c24	N79-25142	US-PATENT-CLASS-521-32	c27	N81-14076
US-PATENT-CLASS-428-920	c15	N79-26100	US-PATENT-CLASS-521-55	c25	N80-23383
US-PATENT-CLASS-428-920	c27	N81-27272	US-PATENT-CLASS-521-62	c27	N81-14076
US-PATENT-CLASS-428-921	c27	N76-16230	US-PATENT-CLASS-521-124	c25	N80-16116
US-PATENT-CLASS-428-921	c24	N78-27180	US-PATENT-CLASS-521-125	c25	N80-16116
US-PATENT-CLASS-428-921	c24	N81-13999	US-PATENT-CLASS-521-127	c25	N80-16116
US-PATENT-CLASS-428-922	c27	N78-14164	US-PATENT-CLASS-521-146	c25	N80-23383
US-PATENT-CLASS-429-13	c44	N79-10513	US-PATENT-CLASS-521-157	c25	N80-16116
US-PATENT-CLASS-429-15	c44	N79-26474	US-PATENT-CLASS-521-918	c25	N80-23383
US-PATENT-CLASS-429-23	c44	N77-14581	US-PATENT-CLASS-525-4	c25	N80-23383
US-PATENT-CLASS-429-27	c27	N81-24257	US-PATENT-CLASS-525-56	c23	N81-29160
US-PATENT-CLASS-429-27	c23	N81-29160	US-PATENT-CLASS-525-61	c27	N81-24257
US-PATENT-CLASS-429-28	c27	N81-24257	US-PATENT-CLASS-525-61	c23	N81-29160
US-PATENT-CLASS-429-28	c23	N81-29160	US-PATENT-CLASS-525-326	c27	N80-24438
US-PATENT-CLASS-429-33	c44	N79-17313	US-PATENT-CLASS-525-336	c27	N80-24438
US-PATENT-CLASS-429-34	c44	N77-14581	US-PATENT-CLASS-525-340	c27	N80-24438
US-PATENT-CLASS-429-41	c44	N79-10513	US-PATENT-CLASS-525-374	c27	N80-24438
US-PATENT-CLASS-429-42	c44	N79-10513	US-PATENT-CLASS-525-375	c27	N80-24438
US-PATENT-CLASS-429-94	c44	N81-24521	US-PATENT-CLASS-525-384	c28	N81-15119
US-PATENT-CLASS-429-101	c44	N79-17313	US-PATENT-CLASS-525-426	c27	N80-26446
US-PATENT-CLASS-429-101	c44	N79-26474	US-PATENT-CLASS-526-1	c27	N76-24405
US-PATENT-CLASS-429-101	c33	N80-20487	US-PATENT-CLASS-526-7	c44	N79-25481
US-PATENT-CLASS-429-105	c44	N77-22606	US-PATENT-CLASS-526-9	c44	N79-25481
US-PATENT-CLASS-429-105	c33	N80-20487	US-PATENT-CLASS-526-13	c27	N78-32256
US-PATENT-CLASS-429-107	c44	N77-22606	US-PATENT-CLASS-526-23	c27	N78-32256
US-PATENT-CLASS-429-107	c33	N80-20487	US-PATENT-CLASS-526-27	c27	N78-32256
US-PATENT-CLASS-429-109	c33	N80-20487	US-PATENT-CLASS-526-49	c27	N78-32256
US-PATENT-CLASS-429-120	c44	N81-24521	US-PATENT-CLASS-526-50	c27	N78-32256
US-PATENT-CLASS-429-139	c27	N80-32516	US-PATENT-CLASS-526-88	c25	N81-19242
US-PATENT-CLASS-429-139	c27	N81-24257	US-PATENT-CLASS-526-193	c27	N78-15276
US-PATENT-CLASS-429-160	c44	N81-24521	US-PATENT-CLASS-526-201	c25	N81-19242
US-PATENT-CLASS-429-164	c44	N81-24521	US-PATENT-CLASS-526-225	c27	N78-15276
US-PATENT-CLASS-429-190	c44	N77-22606	US-PATENT-CLASS-526-255	c27	N76-24405
US-PATENT-CLASS-429-249	c27	N81-24257	US-PATENT-CLASS-526-261	c27	N80-24438
US-PATENT-CLASS-429-249	c23	N81-29160	US-PATENT-CLASS-526-262	c27	N81-27272
US-PATENT-CLASS-429-253	c44	N79-25481	US-PATENT-CLASS-526-275	c27	N78-32256
US-PATENT-CLASS-429-253	c27	N81-24257	US-PATENT-CLASS-526-275	c27	N80-24438
US-PATENT-CLASS-429-253	c23	N81-29160	US-PATENT-CLASS-526-276	c27	N78-32256
US-PATENT-CLASS-429-254	c44	N78-25530	US-PATENT-CLASS-526-276	c27	N80-24438
US-PATENT-CLASS-430-271	c27	N81-25209	US-PATENT-CLASS-526-278	c27	N78-32256
US-PATENT-CLASS-430-325	c27	N81-25209	US-PATENT-CLASS-526-278	c27	N80-24438
US-PATENT-CLASS-430-329	c27	N81-25209	US-PATENT-CLASS-526-914	c28	N81-15119
US-PATENT-CLASS-430-330	c27	N81-25209	US-PATENT-CLASS-528-4	c27	N81-27271
US-PATENT-CLASS-431-2	c27	N81-29129	US-PATENT-CLASS-528-6	c27	N81-27271
US-PATENT-CLASS-431-4	c44	N76-29704	US-PATENT-CLASS-528-73	c25	N80-16116
US-PATENT-CLASS-431-7	c34	N78-27357	US-PATENT-CLASS-528-118	c27	N81-17260
US-PATENT-CLASS-431-9	c23	N73-30665	US-PATENT-CLASS-528-126	c27	N79-28307
US-PATENT-CLASS-431-10	c34	N78-27357	US-PATENT-CLASS-528-127	c27	N79-28307
US-PATENT-CLASS-431-10	c25	N79-11151	US-PATENT-CLASS-528-128	c27	N79-28307
US-PATENT-CLASS-431-11	c44	N77-10636	US-PATENT-CLASS-528-168	c27	N81-27271
US-PATENT-CLASS-431-41	c44	N77-10636	US-PATENT-CLASS-528-207	c27	N80-16158
US-PATENT-CLASS-431-116	c44	N77-10636	US-PATENT-CLASS-528-208	c27	N80-16158
US-PATENT-CLASS-431-158	c25	N78-10224	US-PATENT-CLASS-528-221	c27	N79-28307
US-PATENT-CLASS-431-162	c44	N77-10636	US-PATENT-CLASS-528-222	c27	N81-29229
US-PATENT-CLASS-431-163	c44	N76-29704	US-PATENT-CLASS-528-223	c27	N79-28307
US-PATENT-CLASS-431-170	c44	N77-10636	US-PATENT-CLASS-528-225	c27	N79-28307
US-PATENT-CLASS-431-173	c23	N73-30665	US-PATENT-CLASS-528-227	c27	N79-28307
US-PATENT-CLASS-431-202	c25	N74-33378	US-PATENT-CLASS-528-228	c27	N81-27272
US-PATENT-CLASS-431-208	c25	N79-11151	US-PATENT-CLASS-528-229	c27	N79-28307
US-PATENT-CLASS-431-210	c44	N76-29704	US-PATENT-CLASS-528-229	c27	N79-33316
US-PATENT-CLASS-431-328	c34	N78-27357	US-PATENT-CLASS-528-229	c27	N81-29229
US-PATENT-CLASS-431-352	c28	N71-28915	US-PATENT-CLASS-528-310	c27	N81-17262
US-PATENT-CLASS-431-352	c25	N78-10224	US-PATENT-CLASS-528-310	c27	N81-24256
US-PATENT-CLASS-432-29	c25	N79-11151	US-PATENT-CLASS-528-322	c27	N81-17260
US-PATENT-CLASS-432-223	c25	N79-11151	US-PATENT-CLASS-528-331	c27	N79-28307
US-PATENT-CLASS-432-264	c33	N81-19389	US-PATENT-CLASS-528-336	c27	N79-28307
US-PATENT-CLASS-434-59	c54	N81-27806	US-PATENT-CLASS-528-337	c27	N79-28307
US-PATENT-CLASS-435-3	c51	N80-27067	US-PATENT-CLASS-528-338	c27	N79-28307
US-PATENT-CLASS-435-5	c51	N81-28698	US-PATENT-CLASS-528-342	c27	N79-28307
US-PATENT-CLASS-435-32	c51	N80-27067	US-PATENT-CLASS-528-353	c27	N81-19296
US-PATENT-CLASS-435-34	c51	N80-16714	US-PATENT-CLASS-528-362	c25	N81-14016
US-PATENT-CLASS-435-34	c51	N80-27067	US-PATENT-CLASS-528-362	c27	N81-17259
US-PATENT-CLASS-435-34	c51	N81-28698	US-PATENT-CLASS-528-362	c27	N81-17262
US-PATENT-CLASS-435-38	c51	N80-27067	US-PATENT-CLASS-528-399	c27	N81-27271
US-PATENT-CLASS-435-39	c51	N80-27067	US-PATENT-CLASS-528-401	c27	N79-22300
US-PATENT-CLASS-435-289	c51	N80-27067	US-PATENT-CLASS-528-401	c25	N81-14016
US-PATENT-CLASS-435-290	c51	N80-27067	US-PATENT-CLASS-528-401	c27	N81-17259
US-PATENT-CLASS-435-291	c51	N80-27067	US-PATENT-CLASS-528-401	c27	N81-17262
US-PATENT-CLASS-435-291	c51	N81-28698	US-PATENT-CLASS-528-422	c27	N79-22300
US-PATENT-CLASS-435-311	c51	N80-27067	US-PATENT-CLASS-528-422	c25	N81-14016
US-PATENT-CLASS-435-316	c51	N80-27067	US-PATENT-CLASS-528-422	c27	N81-17259
US-PATENT-CLASS-455-51	c32	N81-14186	US-PATENT-CLASS-528-422	c27	N81-17262
US-PATENT-CLASS-455-71	c32	N81-14186	US-PATENT-CLASS-528-423	c27	N81-17259
US-PATENT-CLASS-455-102	c33	N81-15192	US-PATENT-CLASS-528-481	c27	N80-24438
US-PATENT-CLASS-455-278	c32	N81-29308	US-PATENT-CLASS-536-56	c27	N77-30236

US-PATENT-CLASS-536-58	c27 N77-30236	US-PATENT-3,093,346	c31 N70-37938
US-PATENT-CLASS-536-84	c27 N77-30236	US-PATENT-3,098,630	c02 N70-37939
US-PATENT-CLASS-536-105	c27 N77-30236	US-PATENT-3,100,294	c09 N70-38998
US-PATENT-CLASS-536-536-85	c27 N77-30236	US-PATENT-3,100,990	c14 N70-34813
US-PATENT-CLASS-538-117	c27 N81-17260	US-PATENT-3,102,948	c15 N70-34814
US-PATENT-CLASS-544-193	c27 N78-15276	US-PATENT-3,104,079	c31 N70-37986
US-PATENT-CLASS-544-193	c27 N79-28307	US-PATENT-3,104,082	c02 N70-38011
US-PATENT-CLASS-544-155	c27 N78-32256	US-PATENT-3,105,515	c15 N70-38603
US-PATENT-CLASS-564-229	c27 N81-24256	US-PATENT-3,106,603	c09 N70-38201
US-PATENT-CLASS-568-852	c27 N80-32514	US-PATENT-3,108,171	c33 N70-34812
US-PATENT-CLASS-568-861	c27 N80-32514	US-PATENT-3,110,318	c12 N70-38997
US-PATENT-CLASS-788-704	c36 N79-18307	US-PATENT-3,112,672	c11 N70-38202
US-PATENT-CLASS-859R	c27 N81-15104	US-PATENT-3,115,630	c31 N70-37981
US-PATENT-CLASS-2041-195B	c25 N79-22235	US-PATENT-3,118,100	c03 N71-29129
US-PATENT-CLASS-6554	c35 N77-24455	US-PATENT-3,119,086	c35 N79-33449
US-PATENT-CLASS-6564	c35 N77-24455	US-PATENT-3,119,232	c28 N70-37980
US-PATENT-DES-228,688	c05 N74-10907	US-PATENT-3,120,101	c28 N70-34860
US-PATENT-RE-26,548	c07 N71-12389	US-PATENT-3,120,361	c31 N70-38010
US-PATENT-RE-28,921	c52 N76-30793	US-PATENT-3,120,738	c28 N70-38249
US-PATENT-2,837,706	c15 N71-28952	US-PATENT-3,121,309	c28 N70-35381
US-PATENT-2,898,889	c02 N71-29128	US-PATENT-3,122,000	c15 N70-38020
US-PATENT-2,903,307	c15 N71-29136	US-PATENT-3,122,098	c28 N70-38181
US-PATENT-2,926,123	c33 N71-29151	US-PATENT-3,122,885	c28 N70-38710
US-PATENT-2,934,331	c15 N70-33382	US-PATENT-3,123,248	c11 N70-38182
US-PATENT-2,940,259	c28 N70-33241	US-PATENT-3,123,418	c37 N79-33467
US-PATENT-2,944,316	c15 N71-16076	US-PATENT-3,123,692	c33 N79-33393
US-PATENT-2,945,667	c15 N70-33376	US-PATENT-3,127,157	c15 N70-38225
US-PATENT-2,956,772	c33 N71-29152	US-PATENT-3,128,389	c09 N70-38604
US-PATENT-2,960,002	c14 N70-41946	US-PATENT-3,128,845	c15 N70-38601
US-PATENT-2,971,837	c17 N70-33283	US-PATENT-3,130,940	c33 N70-33344
US-PATENT-2,974,925	c28 N70-33372	US-PATENT-3,131,040	c37 N79-21345
US-PATENT-2,984,735	c11 N70-33329	US-PATENT-3,132,342	c07 N70-38200
US-PATENT-2,991,671	c15 N70-33330	US-PATENT-3,132,476	c28 N70-34294
US-PATENT-2,991,961	c02 N70-33332	US-PATENT-3,132,479	c15 N71-28951
US-PATENT-2,996,212	c31 N71-17680	US-PATENT-3,132,903	c15 N70-38620
US-PATENT-2,997,274	c28 N71-29154	US-PATENT-3,134,389	c37 N79-33468
US-PATENT-3,001,363	c28 N70-33331	US-PATENT-3,135,089	c28 N70-38504
US-PATENT-3,001,395	c14 N70-33386	US-PATENT-3,135,090	c28 N70-38505
US-PATENT-3,001,739	c03 N70-33343	US-PATENT-3,136,123	c28 N70-38199
US-PATENT-3,004,189	c37 N75-29426	US-PATENT-3,136,837	c17 N70-38198
US-PATENT-3,004,735	c14 N70-33322	US-PATENT-3,139,725	c28 N70-38645
US-PATENT-3,005,081	c09 N70-33312	US-PATENT-3,140,728	c15 N70-36908
US-PATENT-3,005,339	c11 N70-33287	US-PATENT-3,141,340	c11 N70-38196
US-PATENT-3,008,229	c15 N70-33311	US-PATENT-3,141,769	c28 N70-38197
US-PATENT-3,010,372	c15 N70-33180	US-PATENT-3,141,932	c03 N70-38713
US-PATENT-3,011,760	c15 N70-33226	US-PATENT-3,143,321	c15 N70-34850
US-PATENT-3,012,400	c28 N70-33374	US-PATENT-3,143,651	c14 N70-40240
US-PATENT-3,012,407	c15 N70-33323	US-PATENT-3,144,219	c31 N70-38676
US-PATENT-3,016,693	c28 N70-33356	US-PATENT-3,144,999	c02 N70-34856
US-PATENT-3,016,863	c12 N70-33305	US-PATENT-3,145,874	c11 N71-15960
US-PATENT-3,022,672	c14 N70-34816	US-PATENT-3,147,422	c09 N70-38712
US-PATENT-3,024,659	c14 N70-34820	US-PATENT-3,149,897	c09 N70-36494
US-PATENT-3,028,122	c02 N70-33286	US-PATENT-3,150,329	c09 N70-38995
US-PATENT-3,028,126	c21 N70-33279	US-PATENT-3,150,387	c03 N70-36778
US-PATENT-3,028,128	c31 N70-33242	US-PATENT-3,152,344	c05 N70-36493
US-PATENT-3,035,333	c28 N70-41818	US-PATENT-3,155,992	c05 N70-34857
US-PATENT-3,038,077	c21 N70-33181	US-PATENT-3,156,090	c28 N70-37245
US-PATENT-3,038,175	c05 N70-33285	US-PATENT-3,157,529	c18 N70-36400
US-PATENT-3,041,587	c14 N70-33179	US-PATENT-3,158,172	c15 N70-34817
US-PATENT-3,041,924	c14 N70-33254	US-PATENT-3,158,336	c31 N70-36410
US-PATENT-3,045,424	c28 N70-40367	US-PATENT-3,158,764	c03 N70-36803
US-PATENT-3,049,876	c28 N70-33284	US-PATENT-3,159,967	c28 N70-36802
US-PATENT-3,053,484	c02 N70-33255	US-PATENT-3,160,825	c14 N70-35220
US-PATENT-3,057,597	c15 N70-33264	US-PATENT-3,160,950	c15 N70-36409
US-PATENT-3,059,220	c09 N70-33182	US-PATENT-3,162,012	c15 N70-36411
US-PATENT-3,063,291	c11 N70-33278	US-PATENT-3,163,935	c14 N70-36907
US-PATENT-3,064,928	c02 N70-33266	US-PATENT-3,164,222	c15 N70-34861
US-PATENT-3,067,573	c28 N70-39899	US-PATENT-3,164,369	c15 N70-36412
US-PATENT-3,068,658	c15 N70-34247	US-PATENT-3,165,356	c05 N70-35152
US-PATENT-3,069,123	c14 N70-39898	US-PATENT-3,166,834	c15 N70-36901
US-PATENT-3,070,330	c21 N70-34539	US-PATENT-3,167,426	c17 N70-36616
US-PATENT-3,070,349	c28 N70-39895	US-PATENT-3,168,827	c14 N70-36807
US-PATENT-3,070,407	c15 N70-39896	US-PATENT-3,169,001	c02 N70-36825
US-PATENT-3,072,574	c18 N70-39897	US-PATENT-3,169,613	c15 N70-36947
US-PATENT-3,076,065	c09 N70-39915	US-PATENT-3,169,725	c31 N70-34296
US-PATENT-3,077,599	c07 N70-40202	US-PATENT-3,170,286	c15 N70-36535
US-PATENT-3,079,113	c02 N70-38009	US-PATENT-3,170,290	c28 N70-36910
US-PATENT-3,080,711	c28 N70-38711	US-PATENT-3,170,295	c27 N71-28929
US-PATENT-3,083,611	c21 N70-35427	US-PATENT-3,170,324	c14 N70-36824
US-PATENT-3,084,421	c17 N70-38490	US-PATENT-3,170,471	c32 N70-36536
US-PATENT-3,085,165	c09 N70-34819	US-PATENT-3,170,486	c15 N70-36492
US-PATENT-3,087,692	c02 N70-34178	US-PATENT-3,170,605	c15 N70-38996
US-PATENT-3,088,441	c15 N70-35409	US-PATENT-3,170,657	c02 N70-34858
US-PATENT-3,090,212	c33 N70-37979	US-PATENT-3,170,660	c02 N70-36804
US-PATENT-3,090,580	c31 N70-37924	US-PATENT-3,170,773	c17 N70-33288
US-PATENT-3,093,000	c15 N70-37925	US-PATENT-3,171,060	c25 N70-33267
		US-PATENT-3,171,081	c14 N70-35666
		US-PATENT-3,172,097	c08 N70-35423
		US-PATENT-3,173,246	c28 N70-33265

US-PATENT-3,173,251	.....	c28 N70-33375	US-PATENT-3,221,547	.....	c14 N70-40201
US-PATENT-3,173,801	.....	c32 N79-19186	US-PATENT-3,221,549	.....	c14 N70-40157
US-PATENT-3,174,278	.....	c25 N70-36946	US-PATENT-3,223,374	.....	c15 N70-40156
US-PATENT-3,174,279	.....	c28 N70-36806	US-PATENT-3,224,001	.....	c07 N70-40063
US-PATENT-3,174,827	.....	c26 N70-36805	US-PATENT-3,224,173	.....	c15 N70-40062
US-PATENT-3,175,789	.....	c31 N70-36654	US-PATENT-3,224,263	.....	c15 N70-40160
US-PATENT-3,176,222	.....	c14 N70-36618	US-PATENT-3,224,336	.....	c30 N70-40353
US-PATENT-3,176,499	.....	c14 N70-35368	US-PATENT-3,224,337	.....	c09 N79-21084
US-PATENT-3,176,933	.....	c33 N70-36617	US-PATENT-3,228,492	.....	c15 N70-40354
US-PATENT-3,177,933	.....	c33 N70-36647	US-PATENT-3,228,558	.....	c14 N70-40233
US-PATENT-3,178,883	.....	c21 N70-36538	US-PATENT-3,229,099	.....	c14 N70-40238
US-PATENT-3,180,264	.....	c33 N70-36846	US-PATENT-3,229,102	.....	c14 N70-40239
US-PATENT-3,180,587	.....	c21 N70-36943	US-PATENT-3,229,139	.....	c28 N70-39925
US-PATENT-3,181,821	.....	c31 N70-36645	US-PATENT-3,229,155	.....	c25 N70-41628
US-PATENT-3,182,496	.....	c11 N70-36913	US-PATENT-3,229,463	.....	c28 N70-39931
US-PATENT-3,183,506	.....	c07 N70-36911	US-PATENT-3,229,568	.....	c14 N70-40003
US-PATENT-3,185,023	.....	c14 N70-34298	US-PATENT-3,229,636	.....	c03 N70-39930
US-PATENT-3,187,583	.....	c11 N70-38675	US-PATENT-3,229,682	.....	c09 N70-40234
US-PATENT-3,188,472	.....	c21 N70-34297	US-PATENT-3,229,689	.....	c05 N70-39922
US-PATENT-3,188,844	.....	c15 N70-34249	US-PATENT-3,229,884	.....	c15 N70-39924
US-PATENT-3,189,299	.....	c21 N70-34295	US-PATENT-3,229,905	.....	c04 N78-17031
US-PATENT-3,189,535	.....	c15 N70-34567	US-PATENT-3,229,930	.....	c30 N70-40016
US-PATENT-3,189,726	.....	c33 N70-34545	US-PATENT-3,230,053	.....	c26 N70-40015
US-PATENT-3,189,784	.....	c33 N75-27250	US-PATENT-3,233,862	.....	c37 N79-33469
US-PATENT-3,189,794	.....	c09 N70-34502	US-PATENT-3,236,066	.....	c15 N71-28959
US-PATENT-3,189,864	.....	c09 N70-34596	US-PATENT-3,237,253	.....	c15 N71-15966
US-PATENT-3,190,124	.....	c35 N79-33450	US-PATENT-3,238,345	.....	c11 N71-15925
US-PATENT-3,191,316	.....	c31 N70-34966	US-PATENT-3,238,413	.....	c25 N71-29184
US-PATENT-3,191,379	.....	c27 N70-35534	US-PATENT-3,238,715	.....	c28 N71-14043
US-PATENT-3,191,907	.....	c15 N70-34659	US-PATENT-3,238,730	.....	c03 N71-12260
US-PATENT-3,192,730	.....	c06 N70-34946	US-PATENT-3,238,774	.....	c14 N71-14996
US-PATENT-3,193,883	.....	c27 N70-34783	US-PATENT-3,238,777	.....	c14 N71-15598
US-PATENT-3,194,060	.....	c14 N70-34794	US-PATENT-3,239,660	.....	c23 N71-30292
US-PATENT-3,194,525	.....	c11 N70-35383	US-PATENT-3,242,716	.....	c14 N71-15992
US-PATENT-3,194,951	.....	c08 N70-34778	US-PATENT-3,243,154	.....	c23 N71-15673
US-PATENT-3,196,261	.....	c08 N70-34787	US-PATENT-3,243,791	.....	c07 N71-11298
US-PATENT-3,196,362	.....	c09 N70-35440	US-PATENT-3,244,943	.....	c15 N71-28516
US-PATENT-3,196,557	.....	c11 N70-34615	US-PATENT-3,249,012	.....	c03 N71-12258
US-PATENT-3,196,558	.....	c14 N70-35394	US-PATENT-3,249,013	.....	c03 N71-12259
US-PATENT-3,196,598	.....	c28 N70-34788	US-PATENT-3,251,053	.....	c08 N71-12501
US-PATENT-3,196,675	.....	c14 N70-34618	US-PATENT-3,252,100	.....	c10 N71-28960
US-PATENT-3,196,690	.....	c11 N70-34786	US-PATENT-3,254,395	.....	c28 N71-15658
US-PATENT-3,197,616	.....	c14 N71-28558	US-PATENT-3,254,487	.....	c28 N71-15659
US-PATENT-3,198,955	.....	c08 N70-34743	US-PATENT-3,257,780	.....	c15 N71-15968
US-PATENT-3,198,994	.....	c26 N73-28710	US-PATENT-3,258,582	.....	c02 N71-13421
US-PATENT-3,199,340	.....	c14 N70-34799	US-PATENT-3,258,687	.....	c14 N71-15962
US-PATENT-3,199,343	.....	c11 N70-34844	US-PATENT-3,258,831	.....	c15 N71-15986
US-PATENT-3,199,931	.....	c15 N70-34664	US-PATENT-3,258,912	.....	c27 N71-15634
US-PATENT-3,200,706	.....	c03 N70-34667	US-PATENT-3,258,918	.....	c27 N71-15635
US-PATENT-3,201,560	.....	c33 N70-34540	US-PATENT-3,260,055	.....	c23 N71-15467
US-PATENT-3,201,635	.....	c25 N70-34661	US-PATENT-3,260,204	.....	c31 N71-15692
US-PATENT-3,201,980	.....	c14 N70-40203	US-PATENT-3,260,326	.....	c11 N71-28779
US-PATENT-3,202,381	.....	c31 N70-34176	US-PATENT-3,261,210	.....	c14 N71-15969
US-PATENT-3,202,398	.....	c28 N71-28928	US-PATENT-3,262,025	.....	c15 N73-32361
US-PATENT-3,202,844	.....	c03 N70-34134	US-PATENT-3,262,186	.....	c15 N71-16052
US-PATENT-3,202,915	.....	c14 N70-38602	US-PATENT-3,262,262	.....	c28 N71-15661
US-PATENT-3,202,998	.....	c31 N70-34135	US-PATENT-3,262,351	.....	c15 N71-15922
US-PATENT-3,204,447	.....	c14 N70-34156	US-PATENT-3,262,365	.....	c31 N71-15675
US-PATENT-3,204,889	.....	c03 N70-34157	US-PATENT-3,262,395	.....	c15 N71-30028
US-PATENT-3,205,361	.....	c14 N70-34158	US-PATENT-3,262,518	.....	c05 N71-11199
US-PATENT-3,205,362	.....	c21 N70-35089	US-PATENT-3,262,655	.....	c31 N71-15663
US-PATENT-3,205,381	.....	c03 N70-35408	US-PATENT-3,262,694	.....	c44 N79-19447
US-PATENT-3,206,141	.....	c21 N70-35395	US-PATENT-3,263,016	.....	c33 N71-15625
US-PATENT-3,206,897	.....	c18 N75-27440	US-PATENT-3,263,171	.....	c09 N71-13530
US-PATENT-3,208,215	.....	c28 N70-34162	US-PATENT-3,263,610	.....	c15 N71-13789
US-PATENT-3,208,272	.....	c14 N70-34161	US-PATENT-3,264,135	.....	c15 N71-16075
US-PATENT-3,208,694	.....	c02 N70-34160	US-PATENT-3,270,441	.....	c11 N71-16028
US-PATENT-3,208,707	.....	c31 N70-34159	US-PATENT-3,270,499	.....	c28 N71-15660
US-PATENT-3,209,360	.....	c09 N70-35219	US-PATENT-3,270,501	.....	c31 N71-15647
US-PATENT-3,209,361	.....	c09 N70-35425	US-PATENT-3,270,503	.....	c33 N71-15623
US-PATENT-3,210,927	c28 N70-34175	US-PATENT-3,270,504	c31 N71-15637
US-PATENT-3,211,169	c15 N70-35687	US-PATENT-3,270,505	c21 N71-15582
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US-PATENT-3,676,787	c16 N72-28521	US-PATENT-3,706,970	c21 N73-14692
US-PATENT-3,676,809	c09 N72-29172	US-PATENT-3,708,359	c27 N73-16764
US-PATENT-3,678,191	.....	c10 N72-31273	US-PATENT-3,708,419	.....	c33 N73-16918
US-PATENT-3,678,654	.....	c06 N72-31140	US-PATENT-3,708,671	.....	c14 N73-16483
US-PATENT-3,678,685	.....	c21 N72-31637	US-PATENT-3,708,674	.....	c14 N73-16484
US-PATENT-3,678,771	.....	c37 N74-23070	US-PATENT-3,709,663	.....	c06 N73-16106
US-PATENT-3,679,360	.....	c04 N72-33072	US-PATENT-3,710,122	.....	c16 N73-16536
US-PATENT-3,679,899	.....	c06 N72-31141	US-PATENT-3,710,257	.....	c07 N73-16121
US-PATENT-3,680,142	.....	c09 N72-31235	US-PATENT-3,710,261	.....	c10 N73-16205
US-PATENT-3,680,144	.....	c07 N72-32169	US-PATENT-3,710,329	.....	c10 N73-16206
US-PATENT-3,680,830	.....	c15 N72-31483	US-PATENT-3,711,042	.....	c02 N73-19004
US-PATENT-3,681,581	.....	c08 N72-31226	US-PATENT-3,711,701	.....	c74 N77-21941
US-PATENT-3,686,542	.....	c14 N72-31446	US-PATENT-3,712,120	.....	c14 N73-19421
US-PATENT-3,690,291	.....	c15 N72-32487	US-PATENT-3,712,121	.....	c14 N73-19420
US-PATENT-3,692,533	.....	c05 N72-33096	US-PATENT-3,712,132	.....	c14 N73-20478
US-PATENT-3,693,002	.....	c25 N72-32688	US-PATENT-3,712,195	.....	c14 N73-19419
US-PATENT-3,693,105	.....	c10 N72-33230	US-PATENT-3,712,591	.....	c15 N73-19458
US-PATENT-3,693,346	.....	c15 N72-33477	US-PATENT-3,713,163	.....	c09 N73-19234
US-PATENT-3,693,418	.....	c14 N72-33377	US-PATENT-3,713,290	.....	c28 N73-19793
US-PATENT-3,694,041	.....	c15 N72-33476	US-PATENT-3,713,480	.....	c05 N73-20137
US-PATENT-3,694,094	.....	c14 N72-32452	US-PATENT-3,713,987	.....	c15 N73-20514
US-PATENT-3,694,313	.....	c24 N72-33681	US-PATENT-3,714,332	.....	c15 N73-19457
US-PATENT-3,694,581	.....	c08 N72-33172	US-PATENT-3,714,405	.....	c10 N73-20253
US-PATENT-3,694,655	.....	c25 N72-33696	US-PATENT-3,714,432	.....	c14 N73-20475
US-PATENT-3,694,700	.....	c09 N72-33205	US-PATENT-3,714,526	.....	c09 N73-19235
US-PATENT-3,694,753	.....	c07 N72-33146	US-PATENT-3,714,588	.....	c09 N73-20231
US-PATENT-3,694,771	.....	c09 N73-15235	US-PATENT-3,714,624	.....	c14 N73-20474
US-PATENT-3,695,101	.....	c11 N73-12264	US-PATENT-3,714,645	.....	c08 N73-20217
US-PATENT-3,696,418	.....	c09 N73-12211	US-PATENT-3,714,821	.....	c14 N73-20476
US-PATENT-3,696,833	.....	c11 N73-12265	US-PATENT-3,714,833	.....	c11 N73-20267
US-PATENT-3,697,021	.....	c15 N73-12486	US-PATENT-3,715,092	.....	c03 N73-20039
US-PATENT-3,697,630	.....	c15 N73-12489	US-PATENT-3,715,152	.....	c23 N73-20741
US-PATENT-3,697,705	.....	c35 N77-21392	US-PATENT-3,715,590	.....	c14 N73-20477
US-PATENT-3,697,733	.....	c08 N73-12176	US-PATENT-3,715,600	.....	c03 N73-20040
US-PATENT-3,697,950	.....	c08 N73-12177	US-PATENT-3,715,660	.....	c07 N73-20175
US-PATENT-3,697,968	.....	c21 N73-13644	US-PATENT-3,715,663	.....	c07 N73-20174
US-PATENT-3,698,385	.....	c05 N73-13114	US-PATENT-3,715,693	.....	c09 N73-20232
US-PATENT-3,698,412	.....	c14 N73-13418	US-PATENT-3,715,723	.....	c07 N73-20176
US-PATENT-3,698,659	.....	c11 N73-13257	US-PATENT-3,715,915	.....	c32 N73-20740
US-PATENT-3,698,667	.....	c02 N73-13008	US-PATENT-3,718,863	.....	c10 N73-20254
US-PATENT-3,698,848	.....	c15 N73-13464	US-PATENT-3,719,891	.....	c07 N73-25160
US-PATENT-3,699,511	.....	c21 N73-13643	US-PATENT-3,720,075	.....	c33 N73-25952
US-PATENT-3,699,645	.....	c14 N73-13417	US-PATENT-3,720,208	.....	c05 N73-25125
US-PATENT-3,699,799	.....	c15 N73-13463	US-PATENT-3,723,745	.....	c14 N73-25462
US-PATENT-3,699,807	.....	c14 N73-13416	US-PATENT-3,728,861	.....	c28 N73-24783
US-PATENT-3,699,811	.....	c14 N73-13415	US-PATENT-3,729,068	.....	c15 N73-25512
US-PATENT-3,700,005	.....	c15 N73-13462	US-PATENT-3,729,129	.....	c08 N73-25206
US-PATENT-3,700,192	.....	c31 N73-13698	US-PATENT-3,729,260	.....	c14 N73-25463
US-PATENT-3,700,193	.....	c30 N73-12684	US-PATENT-3,729,343	.....	c14 N73-24472
US-PATENT-3,700,291	.....	c15 N73-12488	US-PATENT-3,729,676	.....	c14 N73-24473
US-PATENT-3,700,334	.....	c14 N73-12446	US-PATENT-3,729,736	.....	c07 N73-25161
US-PATENT-3,700,503	.....	c14 N73-12447	US-PATENT-3,729,743	.....	c07 N73-24176
US-PATENT-3,700,538	.....	c18 N73-12604	US-PATENT-3,729,935	.....	c28 N73-24784
US-PATENT-3,700,575	.....	c15 N73-12487	US-PATENT-3,730,287	.....	c11 N73-26238
US-PATENT-3,700,603	.....	c14 N73-14428	US-PATENT-3,730,891	.....	c18 N73-26572
US-PATENT-3,700,812	.....	c10 N73-12244	US-PATENT-3,731,528	.....	c12 N73-25262
US-PATENT-3,700,868	.....	c09 N73-13209	US-PATENT-3,731,531	.....	c14 N73-25460
US-PATENT-3,700,869	.....	c08 N73-12175	US-PATENT-3,732,040	.....	c15 N73-24513
US-PATENT-3,700,893	.....	c14 N73-12444	US-PATENT-3,732,158	.....	c17 N73-24569
US-PATENT-3,700,897	.....	c14 N73-12445	US-PATENT-3,732,397	.....	c33 N74-14935
US-PATENT-3,700,961	.....	c23 N73-13660	US-PATENT-3,732,405	.....	c10 N73-25240
US-PATENT-3,701,631	.....	c17 N73-12547	US-PATENT-3,732,409	.....	c08 N73-26175
US-PATENT-3,701,894	.....	c07 N73-13149	US-PATENT-3,732,567	.....	c14 N73-25461
US-PATENT-3,702,463	.....	c08 N73-13187	US-PATENT-3,733,350	.....	c06 N73-26100
US-PATENT-3,702,520	.....	c32 N73-13921	US-PATENT-3,733,424	.....	c32 N73-26910
US-PATENT-3,702,532	.....	c15 N73-13467	US-PATENT-3,733,463	.....	c14 N73-26430
US-PATENT-3,702,536	.....	c28 N73-13773	US-PATENT-3,734,432	.....	c02 N73-26004
US-PATENT-3,702,575	.....	c15 N73-13466	US-PATENT-3,735,206	.....	c10 N73-25243
US-PATENT-3,702,688	.....	c31 N73-14654	US-PATENT-3,735,591	.....	c25 N73-25760
US-PATENT-3,702,735	.....	c23 N73-13661	US-PATENT-3,736,453	.....	c33 N77-22386
US-PATENT-3,702,762	.....	c06 N73-13129	US-PATENT-3,736,607	.....	c02 N73-26006
US-PATENT-3,702,775	.....	c06 N73-13128	US-PATENT-3,736,764	.....	c05 N73-26071
US-PATENT-3,702,791	.....	c15 N73-13465	US-PATENT-3,736,849	.....	c14 N73-26431
US-PATENT-3,702,841	.....	c18 N73-13562	US-PATENT-3,736,938	.....	c05 N73-27062
US-PATENT-3,702,898	.....	c10 N73-13235	US-PATENT-3,736,956	.....	c15 N73-26472
US-PATENT-3,702,933	.....	c23 N73-13662	US-PATENT-3,737,117	.....	c31 N73-26876
US-PATENT-3,702,951	.....	c09 N73-13208	US-PATENT-3,737,118	.....	c15 N73-25513
US-PATENT-3,702,972	.....	c16 N73-13489	US-PATENT-3,737,121	.....	c02 N73-26005
US-PATENT-3,702,979	.....	c14 N73-13420	US-PATENT-3,737,181	.....	c33 N73-26958
US-PATENT-3,704,284	.....	c74 N81-19898	US-PATENT-3,737,217	.....	c05 N73-26072
US-PATENT-3,704,659	.....	c14 N73-14427	US-PATENT-3,737,231	.....	c07 N73-26119
US-PATENT-3,705,255	.....	c15 N73-14469	US-PATENT-3,737,237	.....	c26 N73-26751
US-PATENT-3,705,288	.....	c15 N73-14468	US-PATENT-3,737,639	.....	c10 N73-26230
US-PATENT-3,705,316	.....	c09 N73-14214	US-PATENT-3,737,676	.....	c10 N73-26229
US-PATENT-3,705,406	.....	c07 N73-14130	US-PATENT-3,737,757	.....	c10 N73-26228
US-PATENT-3,706,221	.....	c14 N73-14429	US-PATENT-3,737,762	.....	c14 N73-28486
US-PATENT-3,706,230	.....	c31 N73-14655	US-PATENT-3,737,776	.....	c07 N73-26118
US-PATENT-3,706,281	.....	c31 N73-14653	US-PATENT-3,737,781	.....	c10 N73-25241

US-PATENT-3,737,815	c09 N73-26195	US-PATENT-3,759,747	c44 N74-19692
US-PATENT-3,737,824	c26 N73-26752	US-PATENT-3,759,787	c22 N73-32528
US-PATENT-3,737,905	c14 N73-26432	US-PATENT-3,760,239	c09 N73-32112
US-PATENT-3,737,912	c07 N73-26117	US-PATENT-3,760,248	c10 N73-32145
US-PATENT-3,739,646	c04 N76-26175	US-PATENT-3,760,257	c09 N73-32109
US-PATENT-3,740,671	c10 N73-27171	US-PATENT-3,760,268	c14 N73-32318
US-PATENT-3,740,725	c08 N73-26176	US-PATENT-3,760,394	c10 N73-32144
US-PATENT-3,741,001	c14 N73-27376	US-PATENT-3,762,884	c17 N73-32414
US-PATENT-3,742,316	c09 N73-27150	US-PATENT-3,762,918	c17 N73-32415
US-PATENT-3,744,128	c09 N73-28083	US-PATENT-3,763,204	c06 N73-32030
US-PATENT-3,744,148	c14 N73-28489	US-PATENT-3,763,552	c26 N73-32571
US-PATENT-3,744,247	c28 N73-27699	US-PATENT-3,763,691	c14 N73-32327
US-PATENT-3,744,294	c14 N73-27379	US-PATENT-3,763,708	c35 N74-18323
US-PATENT-3,744,305	c12 N73-28144	US-PATENT-3,763,740	c11 N73-32152
US-PATENT-3,744,320	c14 N73-28487	US-PATENT-3,763,928	c33 N73-32818
US-PATENT-3,744,460	c05 N73-27541	US-PATENT-3,764,097	c02 N74-10034
US-PATENT-3,744,510	c15 N73-27406	US-PATENT-3,764,209	c14 N73-33361
US-PATENT-3,744,738	c14 N73-27378	US-PATENT-3,764,220	c16 N73-33397
US-PATENT-3,744,739	c15 N77-10112	US-PATENT-3,764,790	c33 N74-10223
US-PATENT-3,744,794	c14 N73-27377	US-PATENT-3,764,850	c33 N74-10195
US-PATENT-3,744,912	c16 N73-30476	US-PATENT-3,764,933	c33 N74-10194
US-PATENT-3,744,913	c14 N73-28490	US-PATENT-3,765,229	c35 N74-10415
US-PATENT-3,744,972	c17 N73-27446	US-PATENT-3,765,958	c26 N74-10521
US-PATENT-3,745,082	c18 N73-30532	US-PATENT-3,766,315	c32 N74-10132
US-PATENT-3,745,089	c06 N73-27686	US-PATENT-3,766,380	c35 N74-11284
US-PATENT-3,745,090	c04 N73-27052	US-PATENT-3,767,212	c37 N74-10474
US-PATENT-3,745,149	c06 N73-27580	US-PATENT-3,769,544	c31 N78-17238
US-PATENT-3,745,255	c07 N73-28012	US-PATENT-3,769,623	c32 N74-11000
US-PATENT-3,745,300	c15 N73-28515	US-PATENT-3,769,689	c37 N74-11301
US-PATENT-3,745,352	c08 N73-30135	US-PATENT-3,769,834	c52 N74-10975
US-PATENT-3,745,357	c14 N73-28488	US-PATENT-3,770,021	c33 N74-11050
US-PATENT-3,745,410	c09 N73-30181	US-PATENT-3,770,903	c35 N74-11283
US-PATENT-3,745,475	c14 N73-30386	US-PATENT-3,770,933	c37 N74-11300
US-PATENT-3,745,739	c15 N73-27405	US-PATENT-3,771,037	c08 N74-10942
US-PATENT-3,745,816	c33 N73-27796	US-PATENT-3,771,040	c33 N74-11049
US-PATENT-3,746,998	c07 N73-30113	US-PATENT-3,771,074	c36 N74-11313
US-PATENT-3,747,111	c07 N73-28013	US-PATENT-3,771,959	c25 N74-12813
US-PATENT-3,748,722	c15 N73-33383	US-PATENT-3,772,174	c27 N74-13270
US-PATENT-3,748,853	c23 N73-30665	US-PATENT-3,772,216	c27 N74-12812
US-PATENT-3,748,905	c14 N73-30395	US-PATENT-3,772,220	c27 N74-12814
US-PATENT-3,749,123	c15 N73-30459	US-PATENT-3,772,272	c33 N74-12887
US-PATENT-3,749,156	c31 N73-30829	US-PATENT-3,772,418	c31 N74-13177
US-PATENT-3,749,205	c15 N73-30460	US-PATENT-3,772,691	c32 N74-12912
US-PATENT-3,749,332	c31 N73-32750	US-PATENT-3,773,038	c52 N74-12778
US-PATENT-3,749,362	c15 N73-30457	US-PATENT-3,773,913	c46 N74-13011
US-PATENT-3,749,831	c07 N73-30115	US-PATENT-3,775,101	c37 N74-13179
US-PATENT-3,749,911	c14 N73-30389	US-PATENT-3,775,570	c35 N78-29421
US-PATENT-3,750,016	c14 N73-30388	US-PATENT-3,776,028	c35 N74-13129
US-PATENT-3,750,035	c33 N77-13315	US-PATENT-3,776,432	c37 N74-13178
US-PATENT-3,750,067	c09 N73-30185	US-PATENT-3,776,455	c04 N74-13420
US-PATENT-3,750,131	c10 N73-30205	US-PATENT-3,777,200	c33 N74-12913
US-PATENT-3,750,168	c21 N73-30641	US-PATENT-3,777,490	c20 N74-13502
US-PATENT-3,750,479	c05 N73-30678	US-PATENT-3,777,546	c35 N74-13132
US-PATENT-3,751,123	c15 N73-30458	US-PATENT-3,777,552	c38 N74-15130
US-PATENT-3,751,727	c05 N73-32012	US-PATENT-3,777,605	c39 N74-13131
US-PATENT-3,751,733	c05 N73-32013	US-PATENT-3,777,811	c34 N78-17336
US-PATENT-3,751,913	c06 N73-30697	US-PATENT-3,777,942	c54 N74-12779
US-PATENT-3,751,980	c14 N73-32326	US-PATENT-3,778,685	c33 N74-12951
US-PATENT-3,752,556	c35 N74-17153	US-PATENT-3,778,786	c60 N74-12888
US-PATENT-3,752,559	c14 N73-30393	US-PATENT-3,778,791	c36 N74-13205
US-PATENT-3,752,564	c23 N73-30666	US-PATENT-3,779,788	c70 N74-13436
US-PATENT-3,752,665	c18 N73-32437	US-PATENT-3,780,151	c31 N74-14133
US-PATENT-3,752,847	c06 N73-30698	US-PATENT-3,780,424	c44 N74-14784
US-PATENT-3,752,986	c14 N73-30392	US-PATENT-3,780,563	c35 N74-15092
US-PATENT-3,752,993	c21 N73-30640	US-PATENT-3,780,627	c07 N74-15453
US-PATENT-3,752,996	c91 N74-13130	US-PATENT-3,780,966	c19 N74-15089
US-PATENT-3,753,148	c09 N73-32111	US-PATENT-3,781,111	c36 N74-15145
US-PATENT-3,754,236	c08 N73-32081	US-PATENT-3,781,549	c35 N74-15090
US-PATENT-3,754,263	c09 N73-32110	US-PATENT-3,781,562	c35 N74-15091
US-PATENT-3,754,976	c15 N73-32360	US-PATENT-3,781,902	c35 N74-15831
US-PATENT-3,755,265	c06 N73-33076	US-PATENT-3,781,933	c54 N74-14845
US-PATENT-3,755,283	c06 N73-32029	US-PATENT-3,781,958	c37 N74-15128
US-PATENT-3,755,686	c03 N73-31988	US-PATENT-3,782,177	c38 N74-15395
US-PATENT-3,756,920	c05 N73-32011	US-PATENT-3,782,181	c34 N74-15652
US-PATENT-3,757,183	c09 N73-32107	US-PATENT-3,782,205	c35 N74-15094
US-PATENT-3,757,476	c31 N73-32749	US-PATENT-3,782,334	c51 N74-15778
US-PATENT-3,757,568	c14 N73-32323	US-PATENT-3,782,698	c35 N74-15093
US-PATENT-3,757,659	c14 N73-32322	US-PATENT-3,782,699	c35 N74-15126
US-PATENT-3,758,112	c05 N73-32014	US-PATENT-3,782,737	c37 N74-15125
US-PATENT-3,758,718	c10 N73-32143	US-PATENT-3,782,825	c35 N74-15146
US-PATENT-3,758,741	c15 N73-32358	US-PATENT-3,782,835	c74 N74-15095
US-PATENT-3,758,781	c14 N73-32317	US-PATENT-3,782,904	c35 N74-15127
US-PATENT-3,758,877	c16 N73-32391	US-PATENT-3,783,250	c62 N74-14920
US-PATENT-3,759,152	c14 N73-32319	US-PATENT-3,783,354	c33 N74-14956
US-PATENT-3,759,249	c05 N73-32015	US-PATENT-3,783,399	c33 N74-14939
US-PATENT-3,759,443	c28 N73-32606	US-PATENT-3,783,443	c35 N74-16135
US-PATENT-3,759,588	c15 N73-32359	US-PATENT-3,784,499	c27 N74-17283
US-PATENT-3,759,672	c14 N73-32320	US-PATENT-3,787,959	c37 N74-18128
US-PATENT-3,759,746	c09 N73-32108	US-PATENT-3,788,163	c37 N74-18127

US-PATENT-3,789,654	C25 N74-18551	US-PATENT-3,814,939	C25 N74-26947
US-PATENT-3,789,920	C34 N74-18552	US-PATENT-3,815,048	C33 N74-26732
US-PATENT-3,789,947	C37 N74-18125	US-PATENT-3,815,109	C52 N74-26625
US-PATENT-3,790,037	C54 N74-17853	US-PATENT-3,815,205	C33 N74-26977
US-PATENT-3,790,347	C37 N74-18123	US-PATENT-3,815,969	C35 N74-26946
US-PATENT-3,790,409	C44 N74-19693	US-PATENT-3,816,657	C32 N74-26654
US-PATENT-3,790,432	C37 N74-18126	US-PATENT-3,816,785	C73 N74-26767
US-PATENT-3,790,650	C31 N74-18124	US-PATENT-3,817,082	C34 N74-27730
US-PATENT-3,790,795	C35 N74-18088	US-PATENT-3,817,084	C31 N74-27900
US-PATENT-3,790,906	C33 N74-17927	US-PATENT-3,817,622	C75 N74-30156
US-PATENT-3,791,207	C09 N74-17555	US-PATENT-3,817,627	C35 N74-27860
US-PATENT-3,792,399	C33 N74-17928	US-PATENT-3,818,325	C44 N74-27519
US-PATENT-3,793,109	C31 N74-18089	US-PATENT-3,818,346	C33 N74-27705
US-PATENT-3,795,134	C09 N74-19528	US-PATENT-3,818,767	C35 N74-28097
US-PATENT-3,795,448	C72 N74-19310	US-PATENT-3,818,775	C37 N74-27901
US-PATENT-3,795,840	C33 N74-17929	US-PATENT-3,818,814	C31 N74-27902
US-PATENT-3,795,858	C35 N74-18090	US-PATENT-3,819,299	C37 N74-27904
US-PATENT-3,795,862	C33 N74-17930	US-PATENT-3,819,419	C34 N74-27861
US-PATENT-3,795,900	C35 N74-17885	US-PATENT-3,819,440	C32 N74-27612
US-PATENT-3,795,910	C44 N74-19870	US-PATENT-3,819,550	C27 N74-27037
US-PATENT-3,796,473	C37 N74-20063	US-PATENT-3,820,095	C33 N74-27862
US-PATENT-3,796,592	C24 N74-19769	US-PATENT-3,820,286	C37 N74-27905
US-PATENT-3,797,098	C37 N74-21057	US-PATENT-3,820,388	C35 N74-27865
US-PATENT-3,797,919	C70 N74-21300	US-PATENT-3,820,529	C52 N74-27864
US-PATENT-3,798,741	C31 N74-21059	US-PATENT-3,820,630	C07 N74-27490
US-PATENT-3,798,748	C37 N74-21055	US-PATENT-3,820,741	C37 N74-27903
US-PATENT-3,798,778	C19 N74-21015	US-PATENT-3,820,918	C07 N74-28226
US-PATENT-3,798,896	C37 N74-21060	US-PATENT-3,821,102	C34 N74-27744
US-PATENT-3,799,149	C52 N74-20728	US-PATENT-3,821,462	C33 N74-27683
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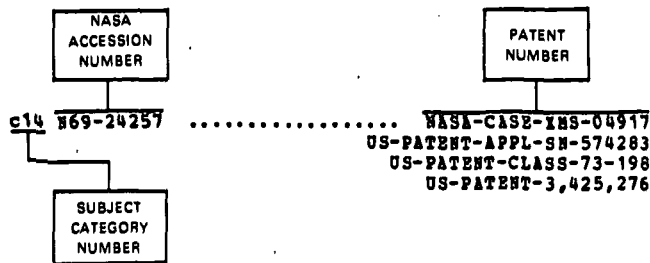
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Section 2

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Listings in the index are arranged numerically by NASA accession number. The category number indicates the category in Section 1 (Abstracts) in which the citation is located. The NASA accession number denotes the number by which the citation is identified within the subject category. The "patent" numbers are the identification numbers that have been assigned to the item by the issuing body or other agency.

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c28 N70-33265	NASA-CASE-XLH-00817 US-PATENT-APPL-SN-264735 US-PATENT-CLASS-60-35.3 US-PATENT-3,173,246	US-PATENT-APPL-SN-58147 US-PATENT-CLASS-60-35.5 US-PATENT-3,016,693
c02 N70-33266	NASA-CASE-XLA-00221 US-PATENT-APPL-SN-51473 US-PATENT-CLASS-244-46 US-PATENT-3,064,928	NASA-CASE-XLB-00037 US-PATENT-APPL-SN-639589 US-PATENT-CLASS-253-39.15 US-PATENT-2,974,925
c25 N70-33267	NASA-CASE-XLA-00675 US-PATENT-APPL-SN-178213 US-PATENT-CLASS-315-111 US-PATENT-3,171,060	NASA-CASE-XLA-00154 US-PATENT-APPL-SN-31242 US-PATENT-CLASS-60-35.6 US-PATENT-3,012,400
c11 N70-33278	NASA-CASE-XLB-00168 US-PATENT-APPL-SN-842170 US-PATENT-CLASS-73-116 US-PATENT-3,063,291	NASA-CASE-XLB-00207 US-PATENT-APPL-SN-180370 US-PATENT-CLASS-60-35.6 US-PATENT-3,173,251
c21 N70-33279	NASA-CASE-XPF-00181 US-PATENT-APPL-SN-28175 US-PATENT-CLASS-244-83 US-PATENT-3,028,126	NASA-CASE-XLB-00101 US-PATENT-APPL-SN-551961 US-PATENT-CLASS-251-173 US-PATENT-2,945,667
c17 N70-33283	NASA-CASE-XLB-00151 US-PATENT-APPL-SN-848481 US-PATENT-CLASS-75-171 US-PATENT-2,971,837	NASA-CASE-XLB-00010 US-PATENT-APPL-SN-554899 US-PATENT-CLASS-266-19 US-PATENT-2,934,331
c28 N70-33284	NASA-CASE-XLB-00078 US-PATENT-APPL-SN-18776 US-PATENT-CLASS-60-35.6 US-PATENT-3,049,876	NASA-CASE-XLA-00113 US-PATENT-APPL-SN-2792 US-PATENT-CLASS-73-147 US-PATENT-3,001,395
c05 N70-33285	NASA-CASE-XLA-00118 US-PATENT-APPL-SN-840983 US-PATENT-CLASS-5-345 US-PATENT-3,038,175	NASA-CASE-XLB-00212 US-PATENT-APPL-SN-151598 US-PATENT-CLASS-310-4 US-PATENT-3,202,844
c02 N70-33286	NASA-CASE-XLA-00142 US-PATENT-APPL-SN-26375 US-PATENT-CLASS-244-46 US-PATENT-3,028,122	NASA-CASE-XLA-00686 US-PATENT-APPL-SN-195347 US-PATENT-CLASS-343-833 US-PATENT-3,202,998
c11 N70-33287	NASA-CASE-XLA-00112 US-PATENT-APPL-SN-843022 US-PATENT-CLASS-73-147 US-PATENT-3,005,339	NASA-CASE-XLB-00266 US-PATENT-APPL-SN-202024 US-PATENT-CLASS-73-15 US-PATENT-3,204,447
c17 N70-33288	NASA-CASE-XLB-00248 US-PATENT-APPL-SN-339821 US-PATENT-CLASS-29-198 US-PATENT-3,170,773	NASA-CASE-XMF-00517 US-PATENT-APPL-SN-216711 US-PATENT-CLASS-244-1 US-PATENT-3,204,889
c12 N70-33305	NASA-CASE-XLA-00229 US-PATENT-APPL-SN-18780 US-PATENT-CLASS-114-66.5 US-PATENT-3,016,863	NASA-CASE-XGS-00359 US-PATENT-APPL-SN-94952 US-PATENT-CLASS-250-203 US-PATENT-3,205,361
c15 N70-33311	NASA-CASE-XLB-00046 US-PATENT-APPL-SN-686796 US-PATENT-CLASS-29-488 US-PATENT-3,008,229	NASA-CASE-XMF-03856 US-PATENT-APPL-SN-416941 US-PATENT-CLASS-248-188.9 US-PATENT-3,208,707
c09 N70-33312	NASA-CASE-XLA-00141 US-PATENT-APPL-SN-19971 US-PATENT-CLASS-219-34 US-PATENT-3,005,081	NASA-CASE-XLA-01804 US-PATENT-APPL-SN-353637 US-PATENT-CLASS-244-50 US-PATENT-3,208,694
c14 N70-33322	NASA-CASE-XLA-00135 US-PATENT-APPL-SN-861152 US-PATENT-CLASS-244-14 US-PATENT-3,004,735	NASA-CASE-XLA-00203 US-PATENT-APPL-SN-227682 US-PATENT-CLASS-73-105 US-PATENT-3,208,272
c15 N70-33323	NASA-CASE-XMF-00341 US-PATENT-APPL-SN-77256 US-PATENT-CLASS-62-45 US-PATENT-3,012,407	NASA-CASE-XMF-01544 US-PATENT-APPL-SN-394638 US-PATENT-CLASS-60-35.55 US-PATENT-3,208,215
c11 N70-33329	NASA-CASE-XLA-00119 US-PATENT-APPL-SN-842171 US-PATENT-CLASS-240-1.2 US-PATENT-2,984,735	NASA-CASE-XLB-01783 US-PATENT-APPL-SN-313132 US-PATENT-CLASS-60-35.5 US-PATENT-3,210,927
c15 N70-33330	NASA-CASE-XLB-00023 US-PATENT-APPL-SN-512352 US-PATENT-CLASS-78-1 US-PATENT-2,991,671	NASA-CASE-XMF-00389 US-PATENT-APPL-SN-151114 US-PATENT-CLASS-244-1 US-PATENT-3,202,381
c28 N70-33331	NASA-CASE-XLA-00105 US-PATENT-APPL-SN-719173 US-PATENT-CLASS-60-35.6 US-PATENT-3,001,363	NASA-CASE-XLA-00166 US-PATENT-APPL-SN-84961 US-PATENT-CLASS-244-46 US-PATENT-3,087,692
c02 N70-33332	NASA-CASE-XLA-00087 US-PATENT-APPL-SN-811509 US-PATENT-CLASS-244-12 US-PATENT-2,991,961	NASA-CASE-XLB-00288 US-PATENT-APPL-SN-118200 US-PATENT-CLASS-62-50 US-PATENT-3,068,658
c03 N70-33343	NASA-CASE-XLA-00115 US-PATENT-APPL-SN-847027 US-PATENT-CLASS-244-1 US-PATENT-3,001,739	NASA-CASE-XMF-00375 US-PATENT-APPL-SN-166969 US-PATENT-CLASS-72-56 US-PATENT-3,188,844
c33 N70-33344	NASA-CASE-XHS-00486 US-PATENT-APPL-SN-300113 US-PATENT-CLASS-244-1 US-PATENT-3,130,940	NASA-CASE-XLB-00208 US-PATENT-APPL-SN-106135 US-PATENT-CLASS-60-35.54 US-PATENT-3,132,476
c28 N70-33356	NASA-CASE-XLB-00267	NASA-CASE-XLA-01989 US-PATENT-APPL-SN-305020
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c28 N70-33375		
c15 N70-33376		
c15 N70-33382		
c14 N70-33386		
c03 N70-34134		
c31 N70-34135		
c14 N70-34156		
c03 N70-34157		
c14 N70-34158		
c31 N70-34159		
c02 N70-34160		
c14 N70-34161		
c28 N70-34162		
c28 N70-34175		
c31 N70-34176		
c02 N70-34178		
c15 N70-34247		
c15 N70-34249		
c28 N70-34294		
c21 N70-34295		

	US-PATENT-CLASS-244-1		US-PATENT-APPL-SN-284265
	US-PATENT-3,189,299		US-PATENT-CLASS-73-88.5
c31 N70-34296	NASA-CASE-XLA-00678		US-PATENT-3,199,340
	US-PATENT-APPL-SN-197551	c33 N70-34812	NASA-CASE-XLE-00387
	US-PATENT-CLASS-244-1		US-PATENT-APPL-SN-203411
	US-PATENT-3,169,725		US-PATENT-CLASS-219-19
c21 N70-34297	NASA-CASE-XGS-00466		US-PATENT-3,108,171
	US-PATENT-APPL-SN-123597	c14 N70-34813	NASA-CASE-XAC-00073
	US-PATENT-CLASS-250-83.3		US-PATENT-APPL-SN-47122
c14 N70-34298	US-PATENT-3,188,472		US-PATENT-CLASS-73-147
	NASA-CASE-XMF-00462		US-PATENT-3,100,990
	US-PATENT-APPL-SN-148001	c15 N70-34814	NASA-CASE-XMF-00392
	US-PATENT-CLASS-88-14		US-PATENT-APPL-SN-151112
	US-PATENT-3,185,023		US-PATENT-CLASS-219-137
c09 N70-34502	NASA-CASE-XMF-00421		US-PATENT-3,102,948
	US-PATENT-APPL-SN-197548	c11 N70-34815	NASA-CASE-XAC-00399
	US-PATENT-CLASS-317-140		US-PATENT-APPL-SN-134481
	US-PATENT-3,189,794		US-PATENT-CLASS-35-12
c21 N70-34539	NASA-CASE-XMF-00185		US-PATENT-3,196,557
	US-PATENT-APPL-SN-97112	c14 N70-34816	NASA-CASE-XAC-00042
	US-PATENT-CLASS-244-76		US-PATENT-APPL-SN-734805
	US-PATENT-3,070,330		US-PATENT-CLASS-73-39E
c33 N70-34540	NASA-CASE-XLA-00330		US-PATENT-3,022,672
	US-PATENT-APPL-SN-264729	c15 N70-34817	NASA-CASE-XAC-00074
	US-PATENT-CLASS-219-121		US-PATENT-APPL-SN-47123
	US-PATENT-3,201,560		US-PATENT-CLASS-137-340
c33 N70-34545	NASA-CASE-XLE-C0490		US-PATENT-3,158,172
	US-PATENT-APPL-SN-252259	c14 N70-34818	NASA-CASE-XLE-00503
	US-PATENT-CLASS-219-347		US-PATENT-APPL-SN-261912
	US-PATENT-3,189,726		US-PATENT-CLASS-73-136
c09 N70-34559	NASA-CASE-LAB-10218-1		US-PATENT-3,196,675
	US-PATENT-APPL-SN-47441	c09 N70-34819	NASA-CASE-XGS-00381
c09 N70-34596	NASA-CASE-XMF-00324		US-PATENT-APPL-SN-104188
	US-PATENT-APPL-SN-1C9789		US-PATENT-CLASS-307-88.5
	US-PATENT-CLASS-339-176		US-PATENT-3,085,165
	US-PATENT-3,189,864	c14 N70-34820	NASA-CASE-XAC-00030
c03 N70-34646	NASA-CASE-NFO-11138		US-PATENT-APPL-SN-760819
	US-PATENT-APPL-SN-9251		US-PATENT-CLASS-73-401
c25 N70-34661	NASA-CASE-XLA-C0147		US-PATENT-3,024,659
	US-PATENT-APPL-SN-178215	c11 N70-34844	NASA-CASE-XLE-00252
	US-PATENT-CLASS-313-156		US-PATENT-APPL-SN-144803
	US-PATENT-3,201,635		US-PATENT-CLASS-73-116
c15 N70-34664	NASA-CASE-XMF-00515		US-PATENT-3,193,343
	US-PATENT-APPL-SN-278790	c15 N70-34850	NASA-CASE-XLA-00754
	US-PATENT-CLASS-308-9		US-PATENT-APPL-SN-209479
	US-PATENT-3,199,931		US-PATENT-CLASS-244-100
c03 N70-34667	NASA-CASE-XLA-00326		US-PATENT-3,143,321
	US-PATENT-APPL-SN-318443	c02 N70-34856	NASA-CASE-XAC-00139
	US-PATENT-CLASS-89-1		US-PATENT-APPL-SN-168560
	US-PATENT-3,200,706		US-PATENT-CLASS-244-51
c08 N70-34675	NASA-CASE-XNP-04162-1		US-PATENT-3,144,999
	US-PATENT-APPL-SN-872664	c05 N70-34857	NASA-CASE-XMS-00863
c14 N70-34697	NASA-CASE-NPO-11106		US-PATENT-APPL-SN-221634
	US-PATENT-APPL-SN-15020		US-PATENT-CLASS-9-11
c15 N70-34699	NASA-CASE-NFO-10682		US-PATENT-3,155,992
	US-PATENT-APPL-SN-15023	c02 N70-34858	NASA-CASE-XLA-00806
c14 N70-34705	NASA-CASE-XMF-00456		US-PATENT-APPL-SN-26375
	US-PATENT-APPL-SN-298800		US-PATENT-APPL-SN-18182E
	US-PATENT-CLASS-73-88.5		US-PATENT-CLASS-244-46
	US-PATENT-3,212,325	c15 N70-34859	US-PATENT-3,170,657
c08 N70-34743	NASA-CASE-XGS-00174		NASA-CASE-XLE-00715
	US-PATENT-APPL-SN-120803		US-PATENT-APPL-SN-212174
	US-PATENT-CLASS-307-88		US-PATENT-CLASS-251-333
	US-PATENT-3,19E,955		US-PATENT-3,191,907
c08 N70-34778	NASA-CASE-XLA-00471	c28 N70-34860	NASA-CASE-XLE-00144
	US-PATENT-APPL-SN-197553		US-PATENT-APPL-SN-177684
	US-PATENT-CLASS-235-154		US-PATENT-CLASS-60-35.6
	US-PATENT-3,194,951		US-PATENT-3,120,101
c27 N70-34783	NASA-CASE-XLA-00304	c15 N70-34861	NASA-CASE-XLE-00810
	US-PATENT-APPL-SN-54552		US-PATENT-APPL-SN-249540
	US-PATENT-CLASS-18-39		US-PATENT-CLASS-188-1
	US-PATENT-3,193,883		US-PATENT-3,164,222
c11 N70-34786	NASA-CASE-XLA-00493	c06 N70-34946	NASA-CASE-XMF-00733
	US-PATENT-APPL-SN-202029		US-PATENT-APPL-SN-256484
	US-PATENT-CLASS-73-432		US-PATENT-CLASS-62-15
	US-PATENT-3,196,690		US-PATENT-3,192,730
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	US-PATENT-APPL-SN-250451		US-PATENT-APPL-SN-29086E
	US-PATENT-CLASS-235-176		US-PATENT-CLASS-35-12
	US-PATENT-3,196,261		US-PATENT-3,191,31E
c28 N70-34788	NASA-CASE-XLE-00388	c15 N70-34967	NASA-CASE-XMF-00595
	US-PATENT-APPL-SN-23456E		US-PATENT-APPL-SN-188594
	US-PATENT-CLASS-55-306		US-PATENT-CLASS-204-298
	US-PATENT-3,196,598		US-PATENT-3,189,535
c14 N70-34794	NASA-CASE-XMF-00479	c15 N70-35087	NASA-CASE-XGS-00587
	US-PATENT-APPL-SN-169977		US-PATENT-APPL-SN-313135
	US-PATENT-CLASS-73-71.2		US-PATENT-CLASS-137-340
	US-PATENT-3,194,060		US-PATENT-3,211,169
c14 N70-34799	NASA-CASE-XLA-00492	c21 N70-35089	NASA-CASE-XNP-00438

	US-PATENT-APPL-SN-180381	c31 N70-36410	NASA-CASE-XMF-00641
	US-PATENT-CLASS-25C-203		US-PATENT-APPL-SN-221945
	US-PATENT-3,205,362		US-PATENT-CLASS-244-1
c05 N70-35152	NASA-CASE-XMS-C1240		US-PATENT-3,158,336
	US-PATENT-APPL-SN-331324	c15 N70-36411	NASA-CASE-XLE-00164
	US-PATENT-CLASS-297-216		US-PATENT-APPL-SN-107870
	US-PATENT-3,165,356		US-PATENT-CLASS-60-39.66
c09 N70-35219	NASA-CASE-XNP-00611		US-PATENT-3,162,012
	US-PATENT-APPL-SN-140443	c15 N70-36412	NASA-CASE-XLE-00170
	US-PATENT-CLASS-343-781		US-PATENT-APPL-SN-232914
	US-PATENT-3,209,360		US-PATENT-CLASS-253-66
c14 N70-35220	NASA-CASE-XNP-00449		US-PATENT-3,164,369
	US-PATENT-APPL-SN-118169	c15 N70-36492	NASA-CASE-XLE-00397
	US-PATENT-CLASS-330-49		US-PATENT-APPL-SN-195346
	US-PATENT-3,160,825		US-PATENT-CLASS-137-614
c14 N70-35368	NASA-CASE-XLE-00335		US-PATENT-3,170,486
	US-PATENT-APPL-SN-197554	c05 N70-36493	NASA-CASE-XMS-00864
	US-PATENT-CLASS-73-15.6		US-PATENT-APPL-SN-258932
	US-PATENT-3,176,499		US-PATENT-CLASS-9-316
c28 N70-35381	NASA-CASE-XHQ-01897		US-PATENT-3,152,344
	US-PATENT-APPL-SN-129579	c09 N70-36494	NASA-CASE-XMF-00369
	US-PATENT-CLASS-60-35.6		US-PATENT-APPL-SN-134782
	US-PATENT-3,121,309		US-PATENT-CLASS-339-176
c09 N70-35382	NASA-CASE-XNP-C0540		US-PATENT-3,149,897
	US-PATENT-APPL-SN-140509	c15 N70-36535	NASA-CASE-XLE-00303
	US-PATENT-CLASS-343-781		US-PATENT-APPL-SN-182692
	US-PATENT-3,212,096		US-PATENT-CLASS-60-35.6
c11 N70-35383	NASA-CASE-XMF-00580		US-PATENT-3,170,286
	US-PATENT-APPL-SN-343425	c32 N70-36536	NASA-CASE-XLA-00204
	US-PATENT-CLASS-248-119		US-PATENT-APPL-SN-189648
	US-PATENT-3,194,525		US-PATENT-CLASS-135-1
c14 N70-35394	NASA-CASE-XNP-00708		US-PATENT-3,170,471
	US-PATENT-APPL-SN-281069	c17 N70-36616	NASA-CASE-XLE-00283
	US-PATENT-CLASS-35-45		US-PATENT-APPL-SN-107866
	US-PATENT-3,196,558		US-PATENT-CLASS-75-171
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	US-PATENT-APPL-SN-180379	c33 N70-36617	NASA-CASE-XLA-01291
	US-PATENT-CLASS-244-1		US-PATENT-APPL-SN-277961
	US-PATENT-3,206,141		US-PATENT-CLASS-244-1
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	US-PATENT-APPL-SN-300712	c14 N70-36618	NASA-CASE-XLE-00143
	US-PATENT-CLASS-251-11		US-PATENT-APPL-SN-104187
	US-PATENT-3,211,414		US-PATENT-CLASS-324-61
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	US-PATENT-APPL-SN-178721	c31 N70-36654	NASA-CASE-XMF-02853
	US-PATENT-CLASS-310-5		US-PATENT-APPL-SN-360182
	US-PATENT-3,205,381		US-PATENT-CLASS-244-100
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	US-PATENT-APPL-SN-42022	c03 N70-36778	NASA-CASE-XLA-00838
	US-PATENT-CLASS-121-38		US-PATENT-APPL-SN-192016
	US-PATENT-3,086,441		US-PATENT-CLASS-9-8
c28 N70-35422	NASA-CASE-LBW-10614-1		US-PATENT-3,150,387
	US-PATENT-APPL-SN-38262	c28 N70-36802	NASA-CASE-XMF-00923
c08 N70-35423	NASA-CASE-XNP-00432		US-PATENT-APPL-SN-264736
	US-PATENT-APPL-SN-127234		US-PATENT-CLASS-60-35.5
	US-PATENT-CLASS-340-347		US-PATENT-3,159,967
	US-PATENT-3,172,097	c03 N70-36803	NASA-CASE-XNP-00644
c09 N70-35425	NASA-CASE-XNP-00683		US-PATENT-APPL-SN-212496
	US-PATENT-APPL-SN-251451		US-PATENT-CLASS-310-11
	US-PATENT-CLASS-343-781		US-PATENT-3,158,764
	US-PATENT-3,209,361	c02 N70-36804	NASA-CASE-XLA-00898
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	US-PATENT-APPL-SN-85585		US-PATENT-CLASS-244-152
	US-PATENT-CLASS-88-1		US-PATENT-3,170,660
	US-PATENT-3,083,611	c26 N70-36805	NASA-CASE-XLA-00158
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	US-PATENT-APPL-SN-164428		US-PATENT-CLASS-23-206
	US-PATENT-CLASS-330-14		US-PATENT-3,174,827
	US-PATENT-3,196,362	c28 N70-36806	NASA-CASE-XLE-00145
c27 N70-35534	NASA-CASE-XGS-03556		US-PATENT-APPL-SN-173081
	US-PATENT-APPL-SN-94259		US-PATENT-CLASS-60-35.6
	US-PATENT-CLASS-60-35.6		US-PATENT-3,174,279
	US-PATENT-3,191,379	c14 N70-36807	NASA-CASE-XLA-00100
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	US-PATENT-APPL-SN-33398		US-PATENT-CLASS-73-178
c14 N70-35666	NASA-CASE-XNP-C0646		US-PATENT-3,168,827
	US-PATENT-APPL-SN-173981	c14 N70-36824	NASA-CASE-XLA-00481
	US-PATENT-CLASS-324-33		US-PATENT-APPL-SN-120797
	US-PATENT-3,171,081		US-PATENT-CLASS-73-212
c15 N70-35679	NASA-CASE-HSC-12279-1		US-PATENT-3,170,324
	US-PATENT-APPL-SN-24154	c02 N70-36825	NASA-CASE-XLA-01583
c18 N70-36400	NASA-CASE-XMS-00259		US-PATENT-APPL-SN-327565
	US-PATENT-APPL-SN-145007		US-PATENT-CLASS-244-103
	US-PATENT-CLASS-117-69		US-PATENT-3,169,001
	US-PATENT-3,157,529	c31 N70-36845	NASA-CASE-XMF-02108
c15 N70-36409	NASA-CASE-XLA-00482		US-PATENT-APPL-SN-372727
	US-PATENT-APPL-SN-166970		US-PATENT-CLASS-244-100
	US-PATENT-CLASS-29-423		US-PATENT-3,181,821
	US-PATENT-3,160,950	c33 N70-36846	NASA-CASE-XLA-00189

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	US-PATENT-CLASS-102-49		US-PATENT-3, 120, 361
	US-PATENT-3, 180, 264	c02 N70-38011	NASA-CASE-XLA-00350
c33 N70-36847	NASA-CASE-XNP-00463		US-PATENT-APPL-SN-153266
	US-PATENT-APPL-SN-259487		US-PATENT-CLASS-244-46
	US-PATENT-CLASS-165-96		US-PATENT-3, 104, 082
	US-PATENT-3, 177, 933	c15 N70-38020	NASA-CASE-XLE-00345
c15 N70-36901	NASA-CASE-XPR-00811		US-PATENT-APPL-SN-183978
	US-PATENT-APPL-SN-257346		US-PATENT-CLASS-62-55
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c15 N71-22722	NASA-CASE-XMS-04292		US-PATENT-APPL-SN-492344
	US-PATENT-APPL-SN-517157		US-PATENT-CLASS-128-2.06
	US-PATENT-CLASS-82-14		US-PATENT-3, 384, 075
	US-PATENT-3, 373, 640	c08 N71-22897	NASA-CASE-XNP-01753
c15 N71-22723	NASA-CASE-XNP-01083		US-PATENT-APPL-SN-423412
	US-PATENT-APPL-SN-432028		US-PATENT-CLASS-235-92
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c08 N71-22749	NASA-CASE-XNP-02748		US-PATENT-APPL-SN-505321
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c07 N71-22750	NASA-CASE-XNP-01735		US-PATENT-APPL-SN-422099
	US-PATENT-APPL-SN-408438		US-PATENT-CLASS-73-15
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c14 N71-22752	NASA-CASE-XNP-01974		US-PATENT-APPL-SN-496205
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c14 N71-22765	NASA-CASE-XLA-00934		US-PATENT-APPL-SN-568067
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c33 N71-22792	NASA-CASE-XLA-01243		US-PATENT-APPL-SN-610728
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c07 N71-23026	NASA-CASE-XNP-02791 US-PATENT-APPL-SN-390251 US-PATENT-CLASS-178-6 US-PATENT-3,383,461	c33 N71-23085	NASA-CASE-XPR-03802 US-PATENT-APPL-SN-460877 US-PATENT-CLASS-73-190 US-PATENT-3,367,182
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c09 N71-23189	NASA-CASE-IMP-06028		US-PATENT-APPL-SN-502739
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c14 N71-23225	NASA-CASE-IMP-04817		US-PATENT-APPL-SN-605092
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c14 N71-23227	NASA-CASE-IMP-06515		US-PATENT-APPL-SN-588671
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c06 N71-23230	NASA-CASE-IMP-06409		US-PATENT-APPL-SN-521994
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c03 N71-23239	NASA-CASE-IMP-08217		US-PATENT-APPL-SN-517158
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c06 N71-23500	NASA-CASE-XNP-03250 US-PATENT-APPL-SN-485058 US-PATENT-CLASS-260-85.5 US-PATENT-3,419,537	c14 N71-23790	NASA-CASE-XAC-04885 US-PATENT-APPL-SN-573432 US-PATENT-CLASS-73-141 US-PATENT-3,415,116
c09 N71-23525	NASA-CASE-XGS-02317 US-PATENT-APPL-SN-576183 US-PATENT-CLASS-328-61 US-PATENT-3,464,018	c14 N71-23797	NASA-CASE-XNP-06510 US-PATENT-APPL-SN-562445 US-PATENT-CLASS-250-203 US-PATENT-3,417,247
c06 N71-23527	NASA-CASE-XLE-01997 US-PATENT-APPL-SN-427990 US-PATENT-CLASS-23-230 US-PATENT-3,472,625	c15 N71-23798	NASA-CASE-XNP-02330 US-PATENT-APPL-SN-608944 US-PATENT-CLASS-219-130 US-PATENT-3,469,065
c10 N71-23543	NASA-CASE-XMS-00913 US-PATENT-APPL-SN-416945 US-PATENT-CLASS-317-31 US-PATENT-3,393,347	c15 N71-23809	NASA-CASE-XAC-10019 US-PATENT-APPL-SN-686209 US-PATENT-CLASS-74-89.18 US-PATENT-3,472,086
c10 N71-23544	NASA-CASE-XNP-05382 US-PATENT-APPL-SN-536217 US-PATENT-CLASS-332-19 US-PATENT-3,393,380	c15 N71-23810	NASA-CASE-XLE-05033 US-PATENT-APPL-SN-510474 US-PATENT-CLASS-252-12 US-PATENT-3,466,243
c09 N71-23545	NASA-CASE-XNP-04367 US-PATENT-APPL-SN-457874 US-PATENT-CLASS-307-235 US-PATENT-3,404,289	c15 N71-23811	NASA-CASE-XNP-05297 US-PATENT-APPL-SN-640456 US-PATENT-CLASS-72-354 US-PATENT-3,443,412
c09 N71-23548	NASA-CASE-XNP-06507 US-PATENT-APPL-SN-605099 US-PATENT-CLASS-333-98 US-PATENT-3,419,827	c15 N71-23812	NASA-CASE-XNP-07808 US-PATENT-APPL-SN-684178 US-PATENT-CLASS-308-2 US-PATENT-3,463,563
c09 N71-23573	NASA-CASE-XGS-01418 US-PATENT-APPL-SN-392969 US-PATENT-CLASS-333-73 US-PATENT-3,393,384	c15 N71-23815	NASA-CASE-XNP-07069 US-PATENT-APPL-SN-672382 US-PATENT-CLASS-219-125 US-PATENT-3,469,068
c09 N71-23598	NASA-CASE-XER-11019 US-PATENT-APPL-SN-711971 US-PATENT-CLASS-331-78 US-PATENT-3,470,489	c15 N71-23816	NASA-CASE-XLE-03803 US-PATENT-APPL-SN-505765 US-PATENT-CLASS-220-9 US-PATENT-3,392,865
c22 N71-23599	NASA-CASE-XLE-01903 US-PATENT-APPL-SN-466868 US-PATENT-CLASS-310-4 US-PATENT-3,393,330	c15 N71-23817	NASA-CASE-XLE-06773 US-PATENT-APPL-SN-646124 US-PATENT-CLASS-72-467 US-PATENT-3,469,436
c26 N71-23654	NASA-CASE-XLE-02798 US-PATENT-APPL-SN-660571 US-PATENT-CLASS-148-1.5 US-PATENT-3,390,020	c17 N71-23828	NASA-CASE-XNP-02303 US-PATENT-APPL-SN-453229 US-PATENT-CLASS-148-6.20 US-PATENT-3,416,975
c18 N71-23658	NASA-CASE-XLE-02647 US-PATENT-APPL-SN-430226 US-PATENT-CLASS-220-9 US-PATENT-3,392,864	c31 N71-23912	NASA-CASE-XNP-05941 US-PATENT-APPL-SN-653277 US-PATENT-CLASS-244-1 US-PATENT-3,443,773
c10 N71-23662	NASA-CASE-XGS-01118 US-PATENT-APPL-SN-408442 US-PATENT-CLASS-235-154 US-PATENT-3,399,299	c28 N71-23968	NASA-CASE-XLE-04857 US-PATENT-APPL-SN-621742 US-PATENT-CLASS-239-127.1 US-PATENT-3,460,759
c10 N71-23663	NASA-CASE-XKS-04631 US-PATENT-APPL-SN-663180 US-PATENT-CLASS-200-82 US-PATENT-3,433,909	c32 N71-23971	NASA-CASE-XAC-05632 US-PATENT-APPL-SN-568355 US-PATENT-CLASS-244-77 US-PATENT-3,412,961
c10 N71-23669	NASA-CASE-XAC-10607 US-PATENT-APPL-SN-694345 US-PATENT-CLASS-331-111 US-PATENT-3,470,495	c23 N71-23976	NASA-CASE-XLA-01987 US-PATENT-APPL-SN-542713 US-PATENT-CLASS-346-107 US-PATENT-3,392,403
c14 N71-23698	NASA-CASE-XGS-08259 US-PATENT-APPL-SN-666551 US-PATENT-CLASS-242-192 US-PATENT-3,460,781	c31 N71-24035	NASA-CASE-XLA-01027 US-PATENT-APPL-SN-494283 US-PATENT-CLASS-52-272 US-PATENT-3,416,274
c14 N71-23699	NASA-CASE-XNP-10289 US-PATENT-APPL-SN-674356 US-PATENT-CLASS-324-72 US-PATENT-3,470,466	c15 N71-24042	NASA-CASE-XNP-04731 US-PATENT-APPL-SN-534966 US-PATENT-CLASS-103-46 US-PATENT-3,367,271
		c15 N71-24043	NASA-CASE-XKS-03338

	US-PATENT-APPL-SN-547072		US-PATENT-CLASS-328-133
	US-PATENT-CLASS-89-1.806		US-PATENT-3,509,475
	US-PATENT-3,415,156	c09 N71-24597	NASA-CASE-ARC-10132-1
c15 N71-24044	NASA-CASE-XNP-66888		US-PATENT-APPL-SN-759460
	US-PATENT-APPL-SN-591000		US-PATENT-CLASS-73-396
	US-PATENT-CLASS-62-40		US-PATENT-3,545,275
	US-PATENT-3,415,069	c15 N71-24599	NASA-CASE-HSC-12052-1
c15 N71-24045	NASA-CASE-XGS-04548		US-PATENT-APPL-SN-770371
	US-PATENT-APPL-SN-672383		US-PATENT-CLASS-254-150
	US-PATENT-CLASS-74-100		US-PATENT-CLASS-254-173
	US-PATENT-3,460,397		US-PATENT-CLASS-254-186
c15 N71-24046	NASA-CASE-XLB-10337		US-PATENT-3,545,725
	US-PATENT-APPL-SN-594633	c15 N71-24600	NASA-CASE-XGS-08716
	US-PATENT-CLASS-252-26		US-PATENT-APPL-SN-785611
	US-PATENT-3,391,080		US-PATENT-CLASS-9-9
c15 N71-24047	NASA-CASE-XGS-03120		US-PATENT-CLASS-74-2
	US-PATENT-APPL-SN-485958		US-PATENT-CLASS-89-1.5
	US-PATENT-CLASS-156-3		US-PATENT-CLASS-244-1
	US-PATENT-3,470,043		US-PATENT-CLASS-244-150
c16 N71-24074	NASA-CASE-XLA-03375		US-PATENT-3,540,676
	US-PATENT-APPL-SN-512562	c03 N71-24605	NASA-CASE-XNP-04758
	US-PATENT-CLASS-356-104		US-PATENT-APPL-SN-557861
	US-PATENT-3,446,558		US-PATENT-CLASS-320-17
c17 N71-24142	NASA-CASE-XLB-06969		US-PATENT-3,413,536
	US-PATENT-APPL-SN-655675	c05 N71-24606	NASA-CASE-XKS-10804
	US-PATENT-CLASS-148-126		US-PATENT-APPL-SN-691909
	US-PATENT-3,463,679		US-PATENT-CLASS-35-17
c33 N71-24145	NASA-CASE-XLB-03432		US-PATENT-3,508,347
	US-PATENT-APPL-SN-559349	c06 N71-24607	NASA-CASE-XNP-09699
	US-PATENT-CLASS-13-35		US-PATENT-APPL-SN-711972
	US-PATENT-3,409,730		US-PATENT-CLASS-73-17
c05 N71-24147	NASA-CASE-XMS-10269		US-PATENT-3,546,920
	US-PATENT-APPL-SN-590158	c07 N71-24612	NASA-CASE-XMF-06092
	US-PATENT-CLASS-165-46		US-PATENT-APPL-SN-550088
	US-PATENT-3,425,486		US-PATENT-CLASS-178-7.1
c15 N71-24164	NASA-CASE-XLA-01494		US-PATENT-3,470,318
	US-PATENT-APPL-SN-499122	c07 N71-24613	NASA-CASE-NPO-10851
	US-PATENT-CLASS-156-545		US-PATENT-APPL-SN-805406
	US-PATENT-3,416,988		US-PATENT-CLASS-325-325
c16 N71-24170	NASA-CASE-XLA-04295		US-PATENT-3,551,816
	US-PATENT-APPL-SN-546149	c07 N71-24614	NASA-CASE-XKS-09340
	US-PATENT-CLASS-356-107		US-PATENT-APPL-SN-666555
	US-PATENT-3,468,609		US-PATENT-CLASS-343-703
c18 N71-24183	NASA-CASE-XGS-04799		US-PATENT-3,540,056
	US-PATENT-APPL-SN-452944	c09 N71-24618	NASA-CASE-FNC-10029
	US-PATENT-CLASS-106-84		US-PATENT-APPL-SN-760389
	US-PATENT-3,416,939		US-PATENT-CLASS-128-2.06
c18 N71-24184	NASA-CASE-XNE-02139		US-PATENT-3,547,105
	US-PATENT-APPL-SN-430777	c07 N71-24621	NASA-CASE-GSC-10118-1
	US-PATENT-CLASS-106-84		US-PATENT-APPL-SN-783375
	US-PATENT-3,434,855		US-PATENT-CLASS-179-15
c14 N71-24232	NASA-CASE-XAC-04458		US-PATENT-CLASS-325-4
	US-PATENT-APPL-SN-534975		US-PATENT-CLASS-343-100
	US-PATENT-CLASS-73-400		US-PATENT-3,546,386
	US-PATENT-3,392,586	c07 N71-24622	NASA-CASE-NPO-10388
c14 N71-24233	NASA-CASE-XGS-04478		US-PATENT-APPL-SN-725432
	US-PATENT-APPL-SN-566717		US-PATENT-CLASS-179-15
	US-PATENT-CLASS-73-88.5		US-PATENT-CLASS-324-77
	US-PATENT-3,460,378		US-PATENT-3,548,107
c14 N71-24234	NASA-CASE-XNP-10968	c05 N71-24623	NASA-CASE-XMS-09635
	US-PATENT-APPL-SN-644447		US-PATENT-APPL-SN-586329
	US-PATENT-CLASS-73-15.6		US-PATENT-CLASS-2-2.1
	US-PATENT-3,469,437		US-PATENT-3,516,091
c33 N71-24276	NASA-CASE-XLA-02059	c07 N71-24624	NASA-CASE-GSC-10131-1
	US-PATENT-APPL-SN-576182		US-PATENT-APPL-SN-754055
	US-PATENT-CLASS-165-12		US-PATENT-CLASS-340-172.5
	US-PATENT-3,406,742		US-PATENT-3,546,684
c32 N71-24285	NASA-CASE-XNP-02392	c07 N71-24625	NASA-CASE-XMS-09610
	US-PATENT-APPL-SN-596735		US-PATENT-APPL-SN-766170
	US-PATENT-CLASS-73-49.2		US-PATENT-CLASS-343-113
	US-PATENT-3,399,574		US-PATENT-3,540,054
c31 N71-24315	NASA-CASE-XLA-04901	c08 N71-24633	NASA-CASE-NPO-10567
	US-PATENT-APPL-SN-586325		US-PATENT-APPL-SN-679055
	US-PATENT-CLASS-244-1		US-PATENT-CLASS-235-153
	US-PATENT-3,405,887		US-PATENT-3,517,171
c28 N71-24321	NASA-CASE-XNP-03692	c08 N71-24650	NASA-CASE-NPO-10150
	US-PATENT-APPL-SN-640787		US-PATENT-APPL-SN-660843
	US-PATENT-CLASS-60-263		US-PATENT-CLASS-340-347
	US-PATENT-3,443,384		US-PATENT-3,537,103
c07 N71-24583	NASA-CASE-NPO-10096	c15 N71-24679	NASA-CASE-XNP-10475
	US-PATENT-APPL-SN-730700		US-PATENT-APPL-SN-763868
	US-PATENT-CLASS-325-140		US-PATENT-CLASS-72-369
	US-PATENT-3,533,001		US-PATENT-3,546,917
c09 N71-24595	NASA-CASE-GSC-10021-1	c03 N71-24681	NASA-CASE-XLB-08569-2
	US-PATENT-APPL-SN-750420		US-PATENT-APPL-SN-829825
	US-PATENT-CLASS-343-7.5		US-PATENT-CLASS-29-572
	US-PATENT-3,540,045		US-PATENT-3,541,679
c09 N71-24596	NASA-CASE-XNP-01306-2	c12 N71-24692	NASA-CASE-XPR-02007
	US-PATENT-APPL-SN-684083		US-PATENT-APPL-SN-378080

	US-PATENT-CLASS-73-389		US-PATENT-CLASS-307-88
	US-PATENT-3,273,399		US-PATENT-3,541,346
c14 N71-24693	NASA-CASE-XMF-04415	c09 N71-24804	NASA-CASE-GSC-10299-1
	US-PATENT-APPL-SN-644446		US-PATENT-APPL-SN-836367
	US-PATENT-CLASS-33-174		US-PATENT-CLASS-343-100
	US-PATENT-3,360,864		US-PATENT-3,540,050
c15 N71-24694	NASA-CASE-GSC-10306-1	c09 N71-24805	NASA-CASE-XMF-06892
	US-PATENT-APPL-SN-789278		US-PATENT-APPL-SN-757875
	US-PATENT-CLASS-24-358		US-PATENT-CLASS-318-318
	US-PATENT-3,537,672		US-PATENT-3,546,553
c15 N71-24695	NASA-CASE-XMF-06936	c09 N71-24806	NASA-CASE-NPO-10198
	US-PATENT-APPL-SN-640786		US-PATENT-APPL-SN-723804
	US-PATENT-CLASS-318-382		US-PATENT-CLASS-328-165
	US-PATENT-3,487,281		US-PATENT-3,550,023
c15 N71-24696	NASA-CASE-NPO-10173	c09 N71-24807	NASA-CASE-NPS-14114-2
	US-PATENT-APPL-SN-796360		US-PATENT-APPL-SN-854815
	US-PATENT-CLASS-310-101		US-PATENT-CLASS-165-105
	US-PATENT-3,535,570		US-PATENT-CLASS-165-107
c09 N71-24717	NASA-CASE-XMF-08804		US-PATENT-CLASS-165-138
	US-PATENT-APPL-SN-683606		US-PATENT-CLASS-310-4
	US-PATENT-CLASS-324-181		US-PATENT-3,537,515
	US-PATENT-3,543,159	c09 N71-24808	NASA-CASE-XMF-08880
c03 N71-24718	NASA-CASE-MSC-10960-1		US-PATENT-APPL-SN-605094
	US-PATENT-APPL-SN-751198		US-PATENT-CLASS-333-98
	US-PATENT-CLASS-204-305		US-PATENT-3,416,106
	US-PATENT-3,547,801	c14 N71-24809	NASA-CASE-XMF-08961
c03 N71-24719	NASA-CASE-GSC-10487-1		US-PATENT-APPL-SN-661170
	US-PATENT-APPL-SN-828983		US-PATENT-CLASS-250-84
	US-PATENT-CLASS-320-39		US-PATENT-3,487,216
	US-PATENT-3,541,422	c31 N71-24813	NASA-CASE-XAC-06029-1
c23 N71-24725	NASA-CASE-GSC-10188-1		US-PATENT-APPL-SN-588651
	US-PATENT-APPL-SN-791888		US-PATENT-CLASS-343-100
	US-PATENT-CLASS-62-384		US-PATENT-3,540,048
	US-PATENT-3,545,226	c16 N71-24828	NASA-CASE-XAC-10770-1
c05 N71-24728	NASA-CASE-MSC-12243-1		US-PATENT-APPL-SN-690997
	US-PATENT-APPL-SN-857445		US-PATENT-CLASS-356-28
	US-PATENT-CLASS-244-1		US-PATENT-3,547,540
	US-PATENT-3,537,668	c17 N71-24830	NASA-CASE-XMF-04148
c05 N71-24729	NASA-CASE-MSC-13282-1		US-PATENT-APPL-SN-536210
	US-PATENT-APPL-SN-8498		US-PATENT-CLASS-204-36
	US-PATENT-CLASS-126-2.1		US-PATENT-3,472,742
	US-PATENT-3,548,812	c16 N71-24831	NASA-CASE-NPO-10548
c05 N71-24730	NASA-CASE-XMS-09637-1		US-PATENT-APPL-SN-775072
	US-PATENT-APPL-SN-785710		US-PATENT-CLASS-330-4
	US-PATENT-CLASS-2-2.1		US-PATENT-3,486,123
	US-PATENT-3,537,107	c16 N71-24832	NASA-CASE-ERC-10178
c28 N71-24736	NASA-CASE-XLE-03157		US-PATENT-APPL-SN-800973
	US-PATENT-APPL-SN-591014		US-PATENT-CLASS-331-94.5
	US-PATENT-CLASS-6C-240		US-PATENT-3,550,034
	US-PATENT-3,406,816	c15 N71-24833	NASA-CASE-XMF-03793
c05 N71-24738	NASA-CASE-ARC-10100-1		US-PATENT-APPL-SN-453225
	US-PATENT-APPL-SN-797058		US-PATENT-CLASS-72-56
	US-PATENT-CLASS-128-24		US-PATENT-3,360,972
	US-PATENT-CLASS-128-25	c15 N71-24834	NASA-CASE-XMF-05634
	US-PATENT-3,550,585		US-PATENT-APPL-SN-605096
c06 N71-24739	NASA-CASE-ARC-10098-1		US-PATENT-CLASS-73-95
	US-PATENT-APPL-SN-702967		US-PATENT-3,460,379
	US-PATENT-CLASS-260-2.5	c15 N71-24835	NASA-CASE-NPO-10123
	US-PATENT-3,549,564		US-PATENT-APPL-SN-731388
c06 N71-24740	NASA-CASE-XMF-03074		US-PATENT-CLASS-128-272
	US-PATENT-APPL-SN-593595		US-PATENT-CLASS-128-275
	US-PATENT-CLASS-260-72.5		US-PATENT-3,540,449
	US-PATENT-3,516,971	c15 N71-24836	NASA-CASE-XLE-08917-2
c07 N71-24741	NASA-CASE-NPO-10118		US-PATENT-APPL-SN-852131
	US-PATENT-APPL-SN-704465		US-PATENT-CLASS-72-60
	US-PATENT-CLASS-235-152		US-PATENT-3,541,825
	US-PATENT-3,541,314	c07 N71-24840	NASA-CASE-NPO-10649
c07 N71-24742	NASA-CASE-NPO-10140		US-PATENT-APPL-SN-795182
	US-PATENT-APPL-SN-651737		US-PATENT-CLASS-325-113
	US-PATENT-CLASS-187-7.1		US-PATENT-3,541,450
	US-PATENT-3,541,250	c09 N71-24841	NASA-CASE-XMF-09771
c31 N71-24750	NASA-CASE-XGS-01654		US-PATENT-APPL-SN-698630
	US-PATENT-APPL-SN-434148		US-PATENT-CLASS-333-83
	US-PATENT-CLASS-102-50		US-PATENT-3,541,479
	US-PATENT-3,282,541	c09 N71-24842	NASA-CASE-MSC-12209
c10 N71-24798	NASA-CASE-XLE-03061-1		US-PATENT-APPL-SN-881039
	US-PATENT-APPL-SN-632152		US-PATENT-CLASS-343-797
	US-PATENT-CLASS-340-412		US-PATENT-3,546,705
	US-PATENT-3,546,694	c09 N71-24843	NASA-CASE-XMF-06617
c10 N71-24799	NASA-CASE-XMF-06505		US-PATENT-APPL-SN-656993
	US-PATENT-APPL-SN-562933		US-PATENT-CLASS-324-71
	US-PATENT-CLASS-307-254		US-PATENT-3,541,439
	US-PATENT-3,501,648	c10 N71-24844	NASA-CASE-NPO-10169
c09 N71-24800	NASA-CASE-EBC-10075		US-PATENT-APPL-SN-701733
	US-PATENT-APPL-SN-775870		US-PATENT-CLASS-328-171
	US-PATENT-CLASS-321-45		US-PATENT-3,541,459
	US-PATENT-3,539,905	c23 N71-24857	NASA-CASE-XMS-06056-1
c09 N71-24803	NASA-CASE-NPO-10242		US-PATENT-APPL-SN-532006
	US-PATENT-APPL-SN-749181		US-PATENT-CLASS-350-189

c33 N71-24858	US-PATENT-3,472,577 NASA-CASE-MFS-14253 US-PATENT-APPL-SN-769622 US-PATENT-CLASS-161-69 US-PATENT-3,551,266	c21 N71-24948	US-PATENT-3,548,633 NASA-CASE-ERC-10090 US-PATENT-APPL-SN-811542 US-PATENT-CLASS-343-112 US-PATENT-3,550,129
c10 N71-24861	NASA-CASE-IMP-05195 US-PATENT-APPL-SN-785595 US-PATENT-CLASS-318-599 US-PATENT-3,523,228	c11 N71-24964	NASA-CASE-NPO-10141 US-PATENT-APPL-SN-673227 US-PATENT-CLASS-62-55.5 US-PATENT-3,443,390
c10 N71-24862	NASA-CASE-FRC-10010 US-PATENT-APPL-SN-771937 US-PATENT-CLASS-307-235 US-PATENT-3,543,050	c15 N71-24984	NASA-CASE-MFS-14971 US-PATENT-APPL-SN-827579 US-PATENT-CLASS-74-468 US-PATENT-3,541,875
c10 N71-24863	NASA-CASE-IMP-C2966 US-PATENT-APPL-SN-560968 US-PATENT-CLASS-324-70 US-PATENT-3,406,336	c11 N71-24985	NASA-CASE-KSC-10126 US-PATENT-APPL-SN-845973 US-PATENT-CLASS-73-15 US-PATENT-3,545,252
c14 N71-24864	NASA-CASE-XL8-04503 US-PATENT-APPL-SN-606463 US-PATENT-CLASS-250-225 US-PATENT-3,546,471	c10 N71-25139	NASA-CASE-MFS-10068 US-PATENT-APPL-SN-700541 US-PATENT-CLASS-321-9 US-PATENT-3,487,288
c15 N71-24865	NASA-CASE-IMP-05114-3 US-PATENT-APPL-SN-837378 US-PATENT-CLASS-72-56 US-PATENT-3,540,250	c28 N71-25213	NASA-CASE-GSC-10709-1 US-PATENT-APPL-SN-791288 US-PATENT-CLASS-60-202 US-PATENT-3,545,208
c23 N71-24868	NASA-CASE-ERC-10001 US-PATENT-APPL-SN-712099 US-PATENT-CLASS-35C-310 US-PATENT-3,540,802	c33 N71-25351	NASA-CASE-MFS-14023 US-PATENT-APPL-SN-795217 US-PATENT-CLASS-52-249 US-PATENT-CLASS-52-404
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c15 N73-12487	NASA-CASE-FRC-10019		US-PATENT-CLASS-73-147
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c28 N73-24784	NASA-CASE-NPO-11559 US-PATENT-APPL-SN-147996 US-PATENT-CLASS-60-254 US-PATENT-CLASS-60-256 US-PATENT-CLASS-102-49.7 US-PATENT-CLASS-102-49.8 US-PATENT-3,729,935	c25 N73-25760	NASA-CASE-LEW-11180-1 US-PATENT-APPL-SN-175852 US-PATENT-CLASS-60-202 US-PATENT-CLASS-313-161 US-PATENT-CLASS-313-231 US-PATENT-3,735,591
c05 N73-25125	NASA-CASE-MFS-20332-2 US-PATENT-APPL-SN-195061 US-PATENT-APPL-SN-869260 US-PATENT-CLASS-2-2.1A US-PATENT-CLASS-128-142.5 US-PATENT-CLASS-137-538 US-PATENT-3,720,208	c33 N73-25952	NASA-CASE-LEW-10359-2 US-PATENT-APPL-SN-47063 US-PATENT-APPL-SN-150215 US-PATENT-CLASS-60-200A US-PATENT-CLASS-60-265 US-PATENT-CLASS-60-267 US-PATENT-CLASS-62-467 US-PATENT-CLASS-102-105 US-PATENT-CLASS-244-117A US-PATENT-3,720,075
c07 N73-25160	NASA-CASE-ARC-10097-2 US-PATENT-APPL-SN-115083 US-PATENT-APPL-SN-768662 US-PATENT-CLASS-325-45 US-PATENT-CLASS-325-61 US-PATENT-CLASS-325-113 US-PATENT-CLASS-325-139 US-PATENT-CLASS-340-207 US-PATENT-CLASS-340-258E US-PATENT-3,719,891	c02 N73-26004	NASA-CASE-LAB-10682-1 US-PATENT-APPL-SN-127915 US-PATENT-CLASS-244-75A US-PATENT-CLASS-244-76C US-PATENT-CLASS-244-77F US-PATENT-CLASS-244-77G US-PATENT-3,734,432
c07 N73-25161	NASA-CASE-NPO-11707 US-PATENT-APPL-SN-196399 US-PATENT-CLASS-343-6.5E US-PATENT-CLASS-343-6.8E US-PATENT-3,729,736	c02 N73-26005	NASA-CASE-ARC-10470-1 US-PATENT-APPL-SN-206279 US-PATENT-CLASS-244-13 US-PATENT-CLASS-244-46 US-PATENT-CLASS-244-55 US-PATENT-3,737,121
c08 N73-25206	NASA-CASE-NPO-11497 US-PATENT-APPL-SN-155565 US-PATENT-CLASS-235-10.2 US-PATENT-CLASS-235-92CV US-PATENT-CLASS-235-92DN US-PATENT-CLASS-235-92BA US-PATENT-CLASS-235-92BV US-PATENT-CLASS-235-92E US-PATENT-CLASS-235-151.27 US-PATENT-3,729,129	c02 N73-26006	NASA-CASE-MSC-12393-1 US-PATENT-APPL-SN-203405 US-PATENT-CLASS-9-2A US-PATENT-CLASS-9-3 US-PATENT-CLASS-9-11A US-PATENT-CLASS-114-122 US-PATENT-3,736,607
c10 N73-25240	NASA-CASE-MSC-12428-1 US-PATENT-APPL-SN-170681 US-PATENT-CLASS-179-15A US-PATENT-CLASS-235-151.31 US-PATENT-CLASS-324-77E US-PATENT-CLASS-324-78J US-PATENT-3,732,405	c05 N73-26071	NASA-CASE-ARC-10599-1 US-PATENT-APPL-SN-247481 US-PATENT-CLASS-2-2.1 US-PATENT-CLASS-62-89 US-PATENT-CLASS-62-176 US-PATENT-CLASS-62-207
c10 N73-25241	NASA-CASE-GSC-11239-1		

	US-PATENT-CLASS-62-209		US-PATENT-CLASS-95-1.1
	US-PATENT-CLASS-62-259		US-PATENT-3,736,849
	US-PATENT-CLASS-165-46	c14 N73-26432	NASA-CASE-ERC-10276
	US-PATENT-3,736,764		US-PATENT-APPL-SN-24155
c05 N73-26072	NASA-CASE-ARC-10329-1		US-PATENT-CLASS-250-209
	US-PATENT-APPL-SN-159857		US-PATENT-CLASS-340-15.56C
	US-PATENT-CLASS-128-2.1B		US-PATENT-CLASS-343-100ME
	US-PATENT-CLASS-351-23		US-PATENT-3,737,905
	US-PATENT-CLASS-351-30	c15 N73-26472	NASA-CASE-KSC-10639
	US-PATENT-CLASS-351-36		US-PATENT-APPL-SN-181023
	US-PATENT-3,737,217		US-PATENT-CLASS-137-397
c06 N73-26100	NASA-CASE-GSC-11358-1		US-PATENT-CLASS-137-582
	US-PATENT-APPL-SN-226551		US-PATENT-3,736,956
	US-PATENT-CLASS-260-46.5B	c18 N73-26572	NASA-CASE-ARC-10304-1
	US-PATENT-3,733,350		US-PATENT-APPL-SN-140946
c07 N73-26117	NASA-CASE-KSC-10392		US-PATENT-CLASS-252-8.1
	US-PATENT-APPL-SN-181024		US-PATENT-3,730,891
	US-PATENT-CLASS-343-880	c26 N73-26751	NASA-CASE-MPS-20675
	US-PATENT-CLASS-343-883		US-PATENT-APPL-SN-200085
	US-PATENT-CLASS-343-889		US-PATENT-CLASS-250-219TB
	US-PATENT-CLASS-343-895		US-PATENT-CLASS-356-10E
	US-PATENT-3,737,912		US-PATENT-CLASS-356-16.1
c07 N73-26118	NASA-CASE-NPO-11548		US-PATENT-CLASS-356-202
	US-PATENT-APPL-SN-151411	c26 N73-26752	US-PATENT-3,737,237
	US-PATENT-CLASS-119-15A		NASA-CASE-LBW-11726-1
	US-PATENT-CLASS-179-15BM		US-PATENT-APPL-SN-280031
	US-PATENT-CLASS-325-40		US-PATENT-CLASS-29-599
	US-PATENT-CLASS-343-204		US-PATENT-CLASS-156-16
	US-PATENT-3,737,776		US-PATENT-CLASS-174-DIG.6
c07 N73-26119	NASA-CASE-NPO-11426		US-PATENT-CLASS-336-DIG.1
	US-PATENT-APPL-SN-89210		US-PATENT-CLASS-336-200
	US-PATENT-CLASS-250-199		US-PATENT-3,737,824
	US-PATENT-CLASS-331-94.5	c31 N73-26876	NASA-CASE-MPS-20863
	US-PATENT-CLASS-332-7.51		US-PATENT-APPL-SN-159966
	US-PATENT-CLASS-356-4		US-PATENT-CLASS-244-1SC
	US-PATENT-CLASS-356-5		US-PATENT-CLASS-244-137P
	US-PATENT-3,737,231		US-PATENT-3,737,117
c08 N73-26175	NASA-CASE-NPO-11821-1	c32 N73-26910	NASA-CASE-LAR-10756-1
	US-PATENT-APPL-SN-236285		US-PATENT-APPL-SN-160859
	US-PATENT-CLASS-235-152		US-PATENT-CLASS-73-67.3
	US-PATENT-CLASS-235-164		US-PATENT-CLASS-73-88.5B
	US-PATENT-CLASS-328-167		US-PATENT-CLASS-73-91
	US-PATENT-3,732,409		US-PATENT-CLASS-235-92MT
c08 N73-26176	NASA-CASE-NPO-11456		US-PATENT-3,733,424
	US-PATENT-APPL-SN-153543	c33 N73-26958	NASA-CASE-NPC-11330
	US-PATENT-CLASS-340-172.5		US-PATENT-APPL-SN-118269
	US-PATENT-3,740,725		US-PATENT-CLASS-285-DIG.21
c09 N73-26195	NASA-CASE-GSC-10990-1		US-PATENT-CLASS-285-316
	US-PATENT-APPL-SN-53329		US-PATENT-3,737,181
	US-PATENT-CLASS-333-73R	c04 N73-27052	NASA-CASE-GSC-11092-2
	US-PATENT-CLASS-333-73S		US-PATENT-APPL-SN-60950
	US-PATENT-CLASS-333-82A		US-PATENT-APPL-SN-139250
	US-PATENT-CLASS-333-84M		US-PATENT-CLASS-103.5B
	US-PATENT-3,737,815		US-PATENT-3,745,09C
c10 N73-26228	NASA-CASE-ERC-10403-1	c05 N73-27062	NASA-CASE-LBW-11669-1
	US-PATENT-APPL-SN-253405		US-PATENT-APPL-SN-198885
	US-PATENT-CLASS-317-EIG.6		US-PATENT-CLASS-32-2E
	US-PATENT-CLASS-321-11		US-PATENT-CLASS-32-58
	US-PATENT-CLASS-321-45C		US-PATENT-CLASS-128-2
	US-PATENT-3,737,757		US-PATENT-CLASS-128-24A
c10 N73-26229	NASA-CASE-NPO-11569		US-PATENT-CLASS-128-305
	US-PATENT-APPL-SN-199957		US-PATENT-3,736,93E
	US-PATENT-CLASS-307-220	c06 N73-27086	NASA-CASE-GSC-10225-1
	US-PATENT-CLASS-307-233		US-PATENT-APPL-SN-710621
	US-PATENT-3,737,676		US-PATENT-CLASS-195-66B
c10 N73-26230	NASA-CASE-MSC-13907-1		US-PATENT-3,745,089
	US-PATENT-APPL-SN-254177	c09 N73-27150	NASA-CASE-ERC-10224-2
	US-PATENT-CLASS-235-186		US-PATENT-APPL-SN-221833
	US-PATENT-CLASS-235-194		US-PATENT-APPL-SN-868775
	US-PATENT-CLASS-235-197		US-PATENT-CLASS-29-580
	US-PATENT-3,737,639		US-PATENT-CLASS-317-234G
c11 N73-26238	NASA-CASE-NPO-11366		US-PATENT-CLASS-317-234L
	US-PATENT-APPL-SN-144139		US-PATENT-CLASS-317-234M
	US-PATENT-CLASS-180-6.5		US-PATENT-CLASS-317-234N
	US-PATENT-CLASS-180-7B		US-PATENT-CLASS-317-234E
	US-PATENT-CLASS-180-8A		US-PATENT-3,742,316
	US-PATENT-CLASS-180-9.2B	c10 N73-27171	NASA-CASE-NPO-11941-1
	US-PATENT-CLASS-180-9.5		US-PATENT-APPL-SN-241614
	US-PATENT-CLASS-180-41		US-PATENT-CLASS-330-70CB
	US-PATENT-CLASS-305-35EB		US-PATENT-CLASS-331-17
	US-PATENT-CLASS-305-39		US-PATENT-CLASS-331-25
	US-PATENT-3,730,287		US-PATENT-3,740,671
c14 N73-26430	NASA-CASE-NPO-11304	c14 N73-27376	NASA-CASE-HQN-10037-1
	US-PATENT-APPL-SN-1C1214		US-PATENT-APPL-SN-235957
	US-PATENT-CLASS-219-50		US-PATENT-CLASS-73-28
	US-PATENT-CLASS-219-499		US-PATENT-3,741,001
	US-PATENT-3,733,463	c14 N73-27377	NASA-CASE-MPS-21046-1
c14 N73-26431	NASA-CASE-MSC-12363-1		US-PATENT-APPL-SN-156725
	US-PATENT-APPL-SN-125236		US-PATENT-CLASS-35-12C

	US-PATENT-CLASS-272-73	c09 N73-28083	NASA-CASE-GSC-11215-1
	US-PATENT-3,744,794		US-PATENT-APPL-SN-114873
c14 N73-27378	NASA-CASE-KSC-10626		US-PATENT-CLASS-29-628
	US-PATENT-APPL-SN-180963		US-PATENT-CLASS-29-629
	US-PATENT-CLASS-222-414		US-PATENT-CLASS-29-630
	US-PATENT-CLASS-244-155		US-PATENT-CLASS-29-630A
	US-PATENT-CLASS-244-135		US-PATENT-3,744,128
	US-PATENT-3,744,738	c09 N73-28084	NASA-CASE-XNP-03623
c14 N73-27379	NASA-CASE-FRC-10060-1		US-PATENT-APPL-SN-471154
	US-PATENT-APPL-SN-189290		US-PATENT-CLASS-178-69.5
	US-PATENT-CLASS-73-1DV		US-PATENT-3,402,265
	US-PATENT-CLASS-179-175.1A	c12 N73-28144	NASA-CASE-LAR-10612-1
	US-PATENT-CLASS-340-5C		US-PATENT-APPL-SN-233173
	US-PATENT-3,744,294		US-PATENT-CLASS-73-147
c15 N73-27405	NASA-CASE-MPS-20855		US-PATENT-3,744,305
	US-PATENT-APPL-SN-127647	c14 N73-28486	NASA-CASE-NPO-11749
	US-PATENT-CLASS-53-22A		US-PATENT-APPL-SN-175267
	US-PATENT-CLASS-53-112A		US-PATENT-CLASS-73-15B
	US-PATENT-CLASS-219-348		US-PATENT-CLASS-324-52
	US-PATENT-3,745,739		US-PATENT-3,737,762
c15 N73-27406	NASA-CASE-NPO-11377	c14 N73-28487	NASA-CASE-XLA-08916-2
	US-PATENT-APPL-SN-187262		US-PATENT-APPL-SN-97472
	US-PATENT-CLASS-137-1		US-PATENT-APPL-SN-777765
	US-PATENT-CLASS-137-154		US-PATENT-CLASS-73-170B
	US-PATENT-CLASS-137-604		US-PATENT-CLASS-73-432R
	US-PATENT-3,744,510		US-PATENT-3,744,320
c17 N73-27446	NASA-CASE-LAR-10953-1	c14 N73-28488	NASA-CASE-LEW-11159-1
	US-PATENT-APPL-SN-163152		US-PATENT-APPL-SN-104346
	US-PATENT-CLASS-23-230B		US-PATENT-CLASS-250-336
	US-PATENT-3,744,972		US-PATENT-CLASS-307-306
c28 N73-27699	NASA-CASE-XLR-10453-2		US-PATENT-3,745,357
	US-PATENT-APPL-SN-180473	c14 N73-28489	NASA-CASE-GSC-11074-1
	US-PATENT-APPL-SN-758540		US-PATENT-APPL-SN-198362
	US-PATENT-CLASS-60-202		US-PATENT-CLASS-34-155
	US-PATENT-CLASS-313-63		US-PATENT-CLASS-34-160
	US-PATENT-CLASS-313-217		US-PATENT-CLASS-34-162
	US-PATENT-CLASS-313-218		US-PATENT-3,744,148
	US-PATENT-CLASS-313-230	c14 N73-28490	NASA-CASE-GSC-11444-1
	US-PATENT-CLASS-313-355		US-PATENT-APPL-SN-229128
	US-PATENT-3,744,247		US-PATENT-CLASS-250-203B
c33 N73-27796	NASA-CASE-LAR-10439-1		US-PATENT-CLASS-250-209
	US-PATENT-APPL-SN-182033		US-PATENT-CLASS-250-214R
	US-PATENT-CLASS-73-86		US-PATENT-CLASS-356-141
	US-PATENT-CLASS-73-339		US-PATENT-3,744,913
	US-PATENT-CLASS-73-432R	c14 N73-28491	NASA-CASE-XNP-05231
	US-PATENT-CLASS-356-72		US-PATENT-APPL-SN-524746
	US-PATENT-3,745,816		US-PATENT-CLASS-250-51.5
c05 N73-27941	NASA-CASE-MPS-21109-1		US-PATENT-3,440,419
	US-PATENT-APPL-SN-202769	c15 N73-28515	NASA-CASE-LEW-10533-1
	US-PATENT-CLASS-73-379		US-PATENT-APPL-SN-13465E
	US-PATENT-CLASS-128-2.05R		US-PATENT-CLASS-27-498
	US-PATENT-CLASS-128-2.06R		US-PATENT-CLASS-29-497.5
	US-PATENT-CLASS-272-73		US-PATENT-CLASS-219-62
	US-PATENT-3,744,480		US-PATENT-CLASS-219-107
c06 N73-27980	NASA-CASE-LEW-11325-1		US-PATENT-3,745,30C
	US-PATENT-APPL-SN-184960	c15 N73-28516	NASA-CASE-XNP-01187
	US-PATENT-CLASS-117-161P		US-PATENT-APPL-SN-155598
	US-PATENT-CLASS-117-161UN		US-PATENT-CLASS-317-158
	US-PATENT-CLASS-117-228		US-PATENT-3,244,943
	US-PATENT-CLASS-161-214	c17 N73-28573	NASA-CASE-XNP-08876
	US-PATENT-CLASS-161-227		US-PATENT-APPL-SN-527331
	US-PATENT-CLASS-260-30.2		US-PATENT-CLASS-75-66
	US-PATENT-CLASS-260-30.6DS		US-PATENT-3,419,384
	US-PATENT-CLASS-260-32.6N	c26 N73-28710	NASA-CASE-XNP-01185
	US-PATENT-CLASS-260-33.4R		US-PATENT-APPL-SN-155595
	US-PATENT-CLASS-260-33.6R		US-PATENT-CLASS-317-158
	US-PATENT-CLASS-260-47CP		US-PATENT-3,198,994
	US-PATENT-CLASS-260-65	c05 N73-30078	NASA-CASE-MPS-21010-1
	US-PATENT-CLASS-260-78TF		US-PATENT-APPL-SN-251609
	US-PATENT-CLASS-260-780A		US-PATENT-CLASS-73-379
	US-PATENT-3,745,149		US-PATENT-3,750,479
c07 N73-28012	NASA-CASE-NPO-11593-1	c06 N73-30097	NASA-CASE-LAR-10670-1
	US-PATENT-APPL-SN-172807		US-PATENT-APPL-SN-59692
	US-PATENT-CLASS-179-15FS		US-PATENT-CLASS-60-215
	US-PATENT-CLASS-325-419		US-PATENT-CLASS-149-1
	US-PATENT-CLASS-329-122		US-PATENT-CLASS-149-36
	US-PATENT-3,745,255		US-PATENT-CLASS-252-301.4
c07 N73-28013	NASA-CASE-GSC-11046-1		US-PATENT-CLASS-252-305
	US-PATENT-APPL-SN-182399		US-PATENT-3,751,913
	US-PATENT-CLASS-343-725	c06 N73-30098	NASA-CASE-MPS-21040-1
	US-PATENT-CLASS-343-729		US-PATENT-APPL-SN-183240
	US-PATENT-CLASS-343-797		US-PATENT-CLASS-260-485F
	US-PATENT-CLASS-343-803		US-PATENT-3,752,847
	US-PATENT-CLASS-343-893	c06 N73-30099	NASA-CASE-MPS-10512
	US-PATENT-3,747,111		US-PATENT-APPL-SN-606027
c08 N73-28045	NASA-CASE-XNP-00477		US-PATENT-CLASS-260-77.5
	US-PATENT-APPL-SN-175497		US-PATENT-3,463,761
	US-PATENT-CLASS-340-347	c06 N73-30100	NASA-CASE-MPS-10506
	US-PATENT-3,219,997		US-PATENT-APPL-SN-606036

	US-PATENT-CLASS-260-77.5	c14 N73-30394	NASA-CASE-LAR-10000
	US-PATENT-3,463,762		US-PATENT-APPL-SN-613235
c06 N73-30101	NASA-CASE-MFS-10507		US-PATENT-CLASS-73-398
	US-PATENT-APPL-SN-605994		US-PATENT-3,446,075
	US-PATENT-CLASS-260-615	c14 N73-30395	NASA-CASE-LAR-10623-1
	US-PATENT-3,452,103		US-PATENT-APPL-SN-214086
c06 N73-30102	NASA-CASE-MFS-11492		US-PATENT-CLASS-15-415
	US-PATENT-APPL-SN-707440		US-PATENT-CLASS-73-28
	US-PATENT-CLASS-260-2		US-PATENT-CLASS-73-421.5R
	US-PATENT-3,577,356		US-PATENT-3,748,905
c06 N73-30103	NASA-CASE-MFS-10509	c15 N73-30457	NASA-CASE-GSC-11149-1
	US-PATENT-APPL-SN-605964		US-PATENT-APPL-SN-152849
	US-PATENT-CLASS-260-77.5		US-PATENT-CLASS-29-452
	US-PATENT-3,475,384		US-PATENT-CLASS-81-57.3E
c07 N73-30113	NASA-CASE-NFO-11628-1		US-PATENT-CLASS-254-29A
	US-PATENT-APPL-SN-207211		US-PATENT-3,749,362
	US-PATENT-CLASS-325-420	c15 N73-30458	NASA-CASE-LEW-11087-1
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	US-PATENT-CLASS-325-420		US-PATENT-CLASS-308-188
	US-PATENT-3,746,998		US-PATENT-CLASS-308-193
c07 N73-30115	NASA-CASE-KSC-10654-1		US-PATENT-3,751,123
	US-PATENT-APPL-SN-250766	c15 N73-30459	NASA-CASE-MSC-13587-1
	US-PATENT-CLASS-178-DIG.23		US-PATENT-APPL-SN-206698
	US-PATENT-CLASS-178-6.6DD		US-PATENT-CLASS-137-516.27
	US-PATENT-CLASS-17E-6.8		US-PATENT-CLASS-137-535
	US-PATENT-CLASS-179-158S		US-PATENT-3,749,123
	US-PATENT-3,749,831	c15 N73-30460	NASA-CASE-HQN-10638-1
c08 N73-30135	NASA-CASE-NPC-10817-1		US-PATENT-APPL-SN-212977
	US-PATENT-APPL-SN-82649		US-PATENT-CLASS-188-1C
	US-PATENT-CLASS-250-229		US-PATENT-CLASS-297-386
	US-PATENT-CLASS-250-237R		US-PATENT-3,749,205
	US-PATENT-CLASS-250-239	c16 N73-30476	NASA-CASE-MFS-20823-1
	US-PATENT-3,745,352		US-PATENT-APPL-SN-175981
c09 N73-30181	NASA-CASE-MFS-21214-1		US-PATENT-CLASS-350-3.5
	US-PATENT-APPL-SN-235269		US-PATENT-CLASS-356-106
	US-PATENT-CLASS-313-161		US-PATENT-CLASS-356-109
	US-PATENT-CLASS-315-248		US-PATENT-3,744,912
	US-PATENT-CLASS-315-324	c18 N73-30532	NASA-CASE-ERC-10339-1
	US-PATENT-3,745,410		US-PATENT-APPL-SN-43883
c09 N73-30185	NASA-CASE-NPO-11738-1		US-PATENT-CLASS-156-285
	US-PATENT-APPL-SN-235295		US-PATENT-3,745,082
	US-PATENT-CLASS-335-296	c21 N73-30640	NASA-CASE-GSC-10890-1
	US-PATENT-CLASS-335-297		US-PATENT-APPL-SN-111998
	US-PATENT-3,750,067		US-PATENT-CLASS-244-1SA
c10 N73-30205	NASA-CASE-NFO-11307-1		US-PATENT-CLASS-250-203R
	US-PATENT-APPL-SN-169671		US-PATENT-CLASS-250-209
	US-PATENT-CLASS-340-277		US-PATENT-CLASS-250-236
	US-PATENT-CLASS-340-279		US-PATENT-3,752,993
	US-PATENT-3,750,131	c21 N73-30641	NASA-CASE-LAR-10717-1
c14 N73-30386	NASA-CASE-MFS-20658-1		US-PATENT-APPL-SN-242028
	US-PATENT-APPL-SN-205675		US-PATENT-CLASS-343-6.5R
	US-PATENT-CLASS-324-79D		US-PATENT-CLASS-343-112CA
	US-PATENT-CLASS-328-48		US-PATENT-3,750,168
	US-PATENT-CLASS-328-129	c23 N73-30665	NASA-CASE-LEW-11326-1
	US-PATENT-CLASS-326-134		US-PATENT-APPL-SN-192970
	US-PATENT-3,745,475		US-PATENT-CLASS-60-39.65
c14 N73-30388	NASA-CASE-NPO-11291-1		US-PATENT-CLASS-60-39.66
	US-PATENT-APPL-SN-116790		US-PATENT-CLASS-60-39.72
	US-PATENT-CLASS-324-29.5		US-PATENT-CLASS-60-39.74R
	US-PATENT-CLASS-324-57R		US-PATENT-CLASS-431-5
	US-PATENT-CLASS-324-62R		US-PATENT-CLASS-431-173
	US-PATENT-CLASS-324-95		US-PATENT-3,748,853
	US-PATENT-3,750,016	c23 N73-30666	NASA-CASE-GSC-11296-1
c14 N73-30389	NASA-CASE-MFS-20546-2		US-PATENT-APPL-SN-228190
	US-PATENT-APPL-SN-11220		US-PATENT-CLASS-350-55
	US-PATENT-APPL-SN-51317		US-PATENT-CLASS-350-162SF
	US-PATENT-CLASS-250-65R		US-PATENT-3,752,564
	US-PATENT-CLASS-250-105	c31 N73-30829	NASA-CASE-GSC-11018-1
	US-PATENT-3,749,911		US-PATENT-APPL-SN-244523
c14 N73-30390	NASA-CASE-XGS-07752		US-PATENT-CLASS-165-32
	US-PATENT-APPL-SN-533659		US-PATENT-CLASS-165-47
	US-PATENT-CLASS-73-4		US-PATENT-CLASS-165-96
	US-PATENT-3,395,565		US-PATENT-CLASS-165-105
c14 N73-30391	NASA-CASE-XLA-05087		US-PATENT-CLASS-244-1SS
	US-PATENT-APPL-SN-459407		US-PATENT-3,749,156
	US-PATENT-CLASS-315-111	c03 N73-31988	NASA-CASE-MSC-12396-1
	US-PATENT-3,394,286		US-PATENT-APPL-SN-258331
c14 N73-30392	NASA-CASE-MFS-21441-1		US-PATENT-CLASS-307-18
	US-PATENT-APPL-SN-231662		US-PATENT-CLASS-307-28
	US-PATENT-CLASS-250-394		US-PATENT-CLASS-307-29
	US-PATENT-CLASS-250-518		US-PATENT-CLASS-307-38
	US-PATENT-3,752,986		US-PATENT-3,755,686
c14 N73-30393	NASA-CASE-GSC-11487-1	c05 N73-32011	NASA-CASE-GSC-11169-2
	US-PATENT-APPL-SN-193814		US-PATENT-APPL-SN-60882
	US-PATENT-CLASS-250-203		US-PATENT-APPL-SN-139094
	US-PATENT-CLASS-350-55		US-PATENT-CLASS-195-127
	US-PATENT-CLASS-350-199		US-PATENT-3,756,920
	US-PATENT-CLASS-350-204	c05 N73-32012	NASA-CASE-MSC-12609-1
	US-PATENT-3,752,559		US-PATENT-APPL-SN-750031

	US-PATENT-CLASS-2-2.1A		US-PATENT-3,760,394
	US-PATENT-CLASS-2-81	c10 N73-32145	NASA-CASE-MFS-21465-1
	US-PATENT-CLASS-128-1A		US-PATENT-APPL-SN-218965
c05 N73-32013	US-PATENT-3,751,727		US-PATENT-CLASS-307-271
	NASA-CASE-MFS-16570-1		US-PATENT-CLASS-318-230
	US-PATENT-APPL-SN-228150		US-PATENT-CLASS-318-231
	US-PATENT-CLASS-3-1.1		US-PATENT-CLASS-318-341
	US-PATENT-CLASS-3-2		US-PATENT-CLASS-331-135
	US-PATENT-CLASS-3-6	c11 N73-32152	US-PATENT-3,760,248
	US-PATENT-CLASS-3-12		NASA-CASE-MSC-13789-1
	US-PATENT-3,751,733		US-PATENT-APPL-SN-166487
c05 N73-32014	NASA-CASE-MSC-11561-1		US-PATENT-CLASS-89-8
	US-PATENT-APPL-SN-146940		US-PATENT-CLASS-102-95
	US-PATENT-CLASS-91-186		US-PATENT-CLASS-188-1C
	US-PATENT-CLASS-137-535		US-PATENT-3,763,740
	US-PATENT-CLASS-272-DIG.1	c14 N73-32317	NASA-CASE-NPO-12128-1
	US-PATENT-CLASS-272-DIG.4		US-PATENT-APPL-SN-841845
	US-PATENT-CLASS-272-DIG.5		US-PATENT-CLASS-250-83.3B
	US-PATENT-CLASS-272-79C		US-PATENT-CLASS-250-207
	US-PATENT-3,758,112		US-PATENT-CLASS-313-104
c05 N73-32015	NASA-CASE-MSC-13436-1	c14 N73-32318	US-PATENT-3,758,781
	US-PATENT-APPL-SN-173190		NASA-CASE-KSC-10730-1
	US-PATENT-CLASS-73-194E		US-PATENT-APPL-SN-248469
	US-PATENT-CLASS-73-194M		US-PATENT-CLASS-324-72
	US-PATENT-CLASS-128-2.07		US-PATENT-3,760,268
	US-PATENT-CLASS-128-2.08	c14 N73-32319	NASA-CASE-KSC-10728-1
	US-PATENT-3,759,249		US-PATENT-APPL-SN-292682
c06 N73-32029	NASA-CASE-NPO-10998-1		US-PATENT-CLASS-95-11
	NASA-CASE-NPO-10999-1		US-PATENT-CLASS-95-11.5
	US-PATENT-APPL-SN-145027		US-PATENT-3,759,152
	US-PATENT-CLASS-252-431N	c14 N73-32320	NASA-CASE-GSC-11188-1
	US-PATENT-CLASS-252-431R		US-PATENT-APPL-SN-80029
	US-PATENT-CLASS-260-47UP		US-PATENT-APPL-SN-244440
	US-PATENT-CLASS-260-93.5A		US-PATENT-CLASS-29-195Y
	US-PATENT-CLASS-260-93.5S		US-PATENT-3,759,672
	US-PATENT-CLASS-260-94.2M	c14 N73-32321	NASA-CASE-XNP-05530
	US-PATENT-CLASS-260-94.2R		NASA-CASE-XNP-06933
	US-PATENT-CLASS-260-94.7R		US-PATENT-APPL-SN-488381
	US-PATENT-CLASS-260-567.6M		US-PATENT-CLASS-73-81
	US-PATENT-3,755,283	c14 N73-32322	US-PATENT-3,379,052
c06 N73-32030	NASA-CASE-MFS-20979-2		NASA-CASE-LAR-10319-1
	US-PATENT-APPL-SN-100774		US-PATENT-APPL-SN-197870
	US-PATENT-APPL-SN-219590		US-PATENT-CLASS-95-42
	US-PATENT-CLASS-260-448.2D		US-PATENT-CLASS-346-110
	US-PATENT-3,763,204		US-PATENT-3,757,659
c08 N73-32081	NASA-CASE-MSC-12458-1	c14 N73-32323	NASA-CASE-LAR-10440-1
	US-PATENT-APPL-SN-188927		US-PATENT-APPL-SN-229413
	US-PATENT-CLASS-235-152IE		US-PATENT-CLASS-73-94
	US-PATENT-CLASS-340-347DA		US-PATENT-CLASS-73-103
	US-PATENT-3,754,236		US-PATENT-3,757,568
c09 N73-32107	NASA-CASE-MFS-20207-1	c14 N73-32324	NASA-CASE-LAR-02743
	US-PATENT-APPL-SN-239574		US-PATENT-APPL-SN-404212
	US-PATENT-CLASS-318-254		US-PATENT-CLASS-313-7
	US-PATENT-CLASS-318-328		US-PATENT-3,310,699
	US-PATENT-3,757,183	c14 N73-32325	NASA-CASE-XNP-04231
c09 N73-32108	NASA-CASE-GSC-11368-1		US-PATENT-APPL-SN-362261
	US-PATENT-APPL-SN-237029		US-PATENT-CLASS-250-41.9
	US-PATENT-CLASS-136-24		US-PATENT-3,334,225
	US-PATENT-3,759,746	c14 N73-32326	NASA-CASE-ARC-10362-1
c09 N73-32109	NASA-CASE-GSC-11394-1		US-PATENT-APPL-SN-198289
	US-PATENT-APPL-SN-292698		US-PATENT-CLASS-73-194EM
	US-PATENT-CLASS-136-89		US-PATENT-CLASS-128-2.05F
	US-PATENT-CLASS-250-212		US-PATENT-3,751,980
	US-PATENT-CLASS-321-1.5	c14 N73-32327	NASA-CASE-LAR-10483-1
	US-PATENT-3,760,257		US-PATENT-APPL-SN-184090
c09 N73-32110	NASA-CASE-KSC-10729-1		US-PATENT-CLASS-73-12
	US-PATENT-APPL-SN-221714		US-PATENT-CLASS-73-170B
	US-PATENT-CLASS-343-112B		US-PATENT-3,763,691
	US-PATENT-CLASS-343-113B	c15 N73-32358	NASA-CASE-LEW-11388-1
	US-PATENT-3,754,263		US-PATENT-APPL-SN-289033
c09 N73-32111	NASA-CASE-ARC-10463-1		US-PATENT-CLASS-29-497
	US-PATENT-APPL-SN-241615		US-PATENT-CLASS-219-91
	US-PATENT-CLASS-331-94.5		US-PATENT-CLASS-219-117
	US-PATENT-3,753,148		US-PATENT-3,758,741
c09 N73-32112	NASA-CASE-ARC-10330-1	c15 N73-32359	NASA-CASE-LEW-11152-1
	US-PATENT-APPL-SN-151412		US-PATENT-APPL-SN-198379
	US-PATENT-CLASS-317-235B		US-PATENT-CLASS-308-9
	US-PATENT-CLASS-317-235WW		US-PATENT-CLASS-308-35
	US-PATENT-3,760,239		US-PATENT-3,759,588
c10 N73-32143	NASA-CASE-MSC-13746-1	c15 N73-32360	NASA-CASE-GSC-11163-1
	US-PATENT-APPL-SN-226476		US-PATENT-APPL-SN-205047
	US-PATENT-CLASS-178-18		US-PATENT-CLASS-29-527.2
	US-PATENT-3,756,718		US-PATENT-CLASS-72-53
c10 N73-32144	NASA-CASE-NPO-11703-1		US-PATENT-CLASS-117-66
	US-PATENT-APPL-SN-223560		US-PATENT-CLASS-117-105
	US-PATENT-CLASS-340-166		US-PATENT-CLASS-117-105.5
	US-PATENT-CLASS-340-173		US-PATENT-CLASS-117-130B
	US-PATENT-CLASS-340-223		US-PATENT-CLASS-117-138.8B
	US-PATENT-CLASS-340-415		US-PATENT-CLASS-117-151

	US-PATENT-CLASS-117-1608		US-PATENT-CLASS-29-494
	US-PATENT-3,754,976		US-PATENT-CLASS-29-497.5
c15 N73-32361	NASA-CASE-XNP-01188		US-PATENT-CLASS-29-498
	US-PATENT-APPL-SN-155596		US-PATENT-3,748,722
	US-PATENT-CLASS-317-158	c16 N73-33397	NASA-CASE-ARC-10444-1
	US-PATENT-3,262,025		US-PATENT-APPL-SN-167719
c15 N73-32362	NASA-CASE-XNP-07169		US-PATENT-CLASS-331-94.5A
	US-PATENT-APPL-SN-486884		US-PATENT-CLASS-350-285
	US-PATENT-CLASS-175-26		US-PATENT-CLASS-356-138
	US-PATENT-3,375,885		US-PATENT-CLASS-356-148
c16 N73-32391	NASA-CASE-GSC-11222-1		US-PATENT-CLASS-356-153
	US-PATENT-APPL-SN-251621		US-PATENT-CLASS-356-172
	US-PATENT-CLASS-307-157		US-PATENT-3,764,220
	US-PATENT-CLASS-315-DIG.2	c02 N74-10034	NASA-CASE-LAR-10776-1
	US-PATENT-CLASS-315-101		US-PATENT-APPL-SN-211332
	US-PATENT-CLASS-315-258		US-PATENT-CLASS-244-145
	US-PATENT-CLASS-315-356		US-PATENT-3,764,097
	US-PATENT-CLASS-330-4.3	c32 N74-10132	NASA-CASE-NPO-11302-2
	US-PATENT-CLASS-331-94.5		US-PATENT-APPL-SN-70967
	US-PATENT-3,756,877		US-PATENT-APPL-SN-266822
c17 N73-32414	NASA-CASE-LEW-11267-1		US-PATENT-CLASS-178-69.4B
	US-PATENT-APPL-SN-190316		US-PATENT-3,766,315
	US-PATENT-CLASS-29-196.2	c33 N74-10194	NASA-CASE-NPO-11962-1
	US-PATENT-CLASS-29-196.6		US-PATENT-APPL-SN-292681
	US-PATENT-CLASS-29-197		US-PATENT-CLASS-331-1A
	US-PATENT-3,762,884		US-PATENT-CLASS-331-4
c17 N73-32415	NASA-CASE-LEW-10436-1		US-PATENT-CLASS-331-14
	US-PATENT-APPL-SN-221093		US-PATENT-CLASS-331-17
	US-PATENT-CLASS-73-170		US-PATENT-CLASS-331-18
	US-PATENT-CLASS-75-171		US-PATENT-CLASS-331-178
	US-PATENT-3,762,918		US-PATENT-3,764,933
c18 N73-32437	NASA-CASE-MFS-20861-1	c33 N74-10195	NASA-CASE-LEW-11617-1
	US-PATENT-APPL-SN-160860		US-PATENT-APPL-SN-266832
	US-PATENT-CLASS-75-135		US-PATENT-CLASS-315-5.35
	US-PATENT-3,752,665		US-PATENT-CLASS-315-5.38
c22 N73-32528	NASA-CASE-XLB-00209		US-PATENT-3,764,850
	US-PATENT-APPL-SN-60276	c33 N74-10223	NASA-CASE-LAR-10730-1
	US-PATENT-CLASS-176-169		US-PATENT-APPL-SN-239573
	US-PATENT-3,759,787		US-PATENT-CLASS-235-92CA
c26 N73-32571	NASA-CASE-LEW-11015		US-PATENT-CLASS-235-92DM
	US-PATENT-APPL-SN-235266		US-PATENT-CLASS-235-150.3
	US-PATENT-CLASS-29-599		US-PATENT-CLASS-307-225B
	US-PATENT-CLASS-174-DIG.6		US-PATENT-CLASS-328-48
	US-PATENT-CLASS-174-126CP		US-PATENT-3,764,790
	US-PATENT-CLASS-335-216	c35 N74-10415	NASA-CASE-MFS-20335-1
	US-PATENT-3,763,552		US-PATENT-APPL-SN-238263
c28 N73-32606	NASA-CASE-NPO-12070-1		US-PATENT-CLASS-73-67.8S
	US-PATENT-APPL-SN-153542		US-PATENT-3,765,229
	US-PATENT-CLASS-60-267	c37 N74-10474	NASA-CASE-LEW-10326-3
	US-PATENT-CLASS-165-105		US-PATENT-APPL-SN-99901
	US-PATENT-CLASS-165-141		US-PATENT-CLASS-277-25
	US-PATENT-CLASS-165-185		US-PATENT-CLASS-277-27
	US-PATENT-CLASS-239-127.1		US-PATENT-CLASS-277-96
	US-PATENT-3,759,443		US-PATENT-3,767,212
c31 N73-32749	NASA-CASE-ERC-10365-1	c26 N74-10521	NASA-CASE-LEW-10805-3
	US-PATENT-APPL-SN-99198		US-PATENT-APPL-SN-29917
	US-PATENT-CLASS-52-64		US-PATENT-APPL-SN-266928
	US-PATENT-CLASS-52-80		US-PATENT-CLASS-29-420.5
	US-PATENT-CLASS-52-109		US-PATENT-CLASS-75-200
	US-PATENT-CLASS-52-646		US-PATENT-CLASS-75-226
	US-PATENT-CLASS-287-92		US-PATENT-CLASS-148-126
	US-PATENT-3,757,476		US-PATENT-3,765,958
c31 N73-32750	NASA-CASE-LEW-11101-1	c05 N74-10907	NASA-CASE-XMF-02263
	US-PATENT-APPL-SN-175983		US-PATENT-APPL-SN-78766
	US-PATENT-CLASS-47-1.4		US-PATENT-CLASS-D71-1
	US-PATENT-CLASS-47-17		US-PATENT-DES-228,688
	US-PATENT-CLASS-244-1SC	c08 N74-10942	NASA-CASE-MSC-12394-1
	US-PATENT-CLASS-244-1SS		US-PATENT-APPL-SN-341662
	US-PATENT-3,749,332		US-PATENT-CLASS-244-83
c33 N73-32818	NASA-CASE-NPO-11942-1		US-PATENT-CLASS-318-580
	US-PATENT-APPL-SN-266866		US-PATENT-CLASS-318-628
	US-PATENT-CLASS-165-32		US-PATENT-3,771,037
	US-PATENT-CLASS-165-96	c52 N74-10975	NASA-CASE-MSC-13972-1
	US-PATENT-CLASS-165-106		US-PATENT-APPL-SN-200040
	US-PATENT-CLASS-244-1SS		US-PATENT-CLASS-73-149
	US-PATENT-3,763,928		US-PATENT-CLASS-128-25
c06 N73-33076	NASA-CASE-NPO-10767-1		US-PATENT-3,769,834
	US-PATENT-APPL-SN-241061	c32 N74-11000	NASA-CASE-NPO-13171-1
	US-PATENT-APPL-SN-770417		US-PATENT-APPL-SN-290915
	US-PATENT-CLASS-260-77.5AP		US-PATENT-CLASS-343-781
	US-PATENT-3,755,265		US-PATENT-CLASS-343-909
c14 N73-33361	NASA-CASE-ARC-10468-1		US-PATENT-3,769,623
	US-PATENT-APPL-SN-288857	c33 N74-11049	NASA-CASE-HQN-10792-1
	US-PATENT-CLASS-95-12		US-PATENT-APPL-SN-245063
	US-PATENT-CLASS-355-18		US-PATENT-CLASS-321-2
	US-PATENT-3,764,209		US-PATENT-CLASS-321-18
c15 N73-33383	NASA-CASE-LEW-11026-1		US-PATENT-CLASS-321-45S
	US-PATENT-APPL-SN-196970		US-PATENT-CLASS-323-DIG.1
	US-PATENT-CLASS-29-487		US-PATENT-CLASS-331-62

	US-PATENT-CLASS-331-113A		US-PATENT-CLASS-343-6.5SS
	US-PATENT-3,771,040		US-PATENT-CLASS-343-18B
c33 N74-11050	NASA-CASE-LAR-10868-1		US-PATENT-3,772,691
	US-PATENT-APPL-SN-253249	c33 N74-12913	NASA-CASE-LEW-11162-1
	US-PATENT-CLASS-137-819		US-PATENT-APPL-SN-143508
	US-PATENT-CLASS-137-833		US-PATENT-CLASS-313-32
	US-PATENT-CLASS-137-840		US-PATENT-CLASS-313-153
	US-PATENT-3,770,021		US-PATENT-CLASS-313-209
c35 N74-11283	NASA-CASE-NPO-11659-1		US-PATENT-CLASS-313-217
	US-PATENT-APPL-SN-228189		US-PATENT-CLASS-313-224
	US-PATENT-CLASS-178-6.6DD		US-PATENT-3,777,200
	US-PATENT-CLASS-179-100.2ND	c33 N74-12951	NASA-CASE-MFS-21374-1
	US-PATENT-CLASS-179-100.2T		US-PATENT-APPL-SN-238047
	US-PATENT-CLASS-340-174.1L		US-PATENT-CLASS-317-234E
	US-PATENT-3,770,903		US-PATENT-CLASS-317-234F
c35 N74-11284	NASA-CASE-NPO-11919-1		US-PATENT-CLASS-317-234H
	US-PATENT-APPL-SN-237694		US-PATENT-CLASS-317-234H
	US-PATENT-CLASS-250-343		US-PATENT-CLASS-317-234E
	US-PATENT-3,766,380		US-PATENT-3,778,685
c37 N74-11300	NASA-CASE-LEW-10533-2	c46 N74-13011	NASA-CASE-MSC-12408-1
	US-PATENT-APPL-SN-247055		US-PATENT-APPL-SN-229916
	US-PATENT-CLASS-29-497.5		US-PATENT-CLASS-423-579
	US-PATENT-CLASS-219-78		US-PATENT-3,773,913
	US-PATENT-CLASS-219-101	c35 N74-13129	NASA-CASE-FRC-10051-1
	US-PATENT-CLASS-219-107		US-PATENT-APPL-SN-253725
	US-PATENT-3,770,933		US-PATENT-CLASS-73-88R
c37 N74-11301	NASA-CASE-LAR-10170-1		US-PATENT-CLASS-254-93E
	US-PATENT-APPL-SN-217213		US-PATENT-3,776,028
	US-PATENT-CLASS-29-460	c91 N74-13130	NASA-CASE-NPO-12127-1
	US-PATENT-CLASS-29-498		US-PATENT-APPL-SN-106106
	US-PATENT-CLASS-29-503		US-PATENT-CLASS-250-83CD
	US-PATENT-CLASS-29-527.2		US-PATENT-CLASS-250-219DF
	US-PATENT-CLASS-117-105.2		US-PATENT-3,752,996
	US-PATENT-3,769,689	c39 N74-13131	NASA-CASE-MFS-20730-1
c36 N74-11313	NASA-CASE-HQN-10790-1		US-PATENT-APPL-SN-182977
	US-PATENT-APPL-SN-235962		US-PATENT-CLASS-83-452
	US-PATENT-CLASS-333-83R		US-PATENT-CLASS-83-602
	US-PATENT-CLASS-333-97R		US-PATENT-CLASS-83-917
	US-PATENT-3,771,074		US-PATENT-CLASS-269-48.1
c52 N74-12778	NASA-CASE-MFS-20284-1	c35 N74-13132	US-PATENT-3,777,605
	US-PATENT-APPL-SN-242027		NASA-CASE-LAR-10910-1
	US-PATENT-CLASS-128-2.05T		US-PATENT-APPL-SN-239577
	US-PATENT-CLASS-128-2.06F		US-PATENT-CLASS-73-4E
	US-PATENT-CLASS-324-78D		US-PATENT-CLASS-73-420
	US-PATENT-CLASS-324-186		US-PATENT-3,777,546
	US-PATENT-3,773,038	c31 N74-13177	NASA-CASE-LAR-10547-1
c54 N74-12779	NASA-CASE-MFS-21115-1		US-PATENT-APPL-SN-193980
	US-PATENT-APPL-SN-266930		US-PATENT-CLASS-264-294
	US-PATENT-CLASS-222-309		US-PATENT-3,772,418
	US-PATENT-CLASS-222-340	c37 N74-13178	NASA-CASE-LAR-10544-1
	US-PATENT-CLASS-222-387		US-PATENT-APPL-SN-188928
	US-PATENT-CLASS-222-514		US-PATENT-CLASS-222-193
	US-PATENT-3,777,942		US-PATENT-3,776,432
c27 N74-12812	NASA-CASE-ARC-10464-1	c37 N74-13179	NASA-CASE-LEW-10805-2
	US-PATENT-APPL-SN-158472		US-PATENT-APPL-SN-29917
	US-PATENT-CLASS-260-2.5AM		US-PATENT-APPL-SN-233743
	US-PATENT-3,772,216		US-PATENT-CLASS-29-182
c25 N74-12813	NASA-CASE-LAR-10551-1		US-PATENT-CLASS-29-420.5
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	US-PATENT-4,052,648		US-PATENT-CLASS-307-306
c33 N78-10377	NASA-CASE-NPO-13872-1		US-PATENT-CLASS-338-32S
	US-PATENT-APPL-SN-742034		US-PATENT-CLASS-357-4
	US-PATENT-CLASS-363-57		US-PATENT-CLASS-357-5
	US-PATENT-CLASS-363-89		US-PATENT-CLASS-357-73
	US-PATENT-4,052,659		US-PATENT-4,055,847
c35 N78-10428	NASA-CASE-MSC-14757-1	c35 N78-13400	NASA-CASE-ABC-10639-1
	US-PATENT-APPL-SN-625734		US-PATENT-APPL-SN-643043
	US-PATENT-CLASS-60-560		US-PATENT-CLASS-250-336
	US-PATENT-CLASS-60-574		US-PATENT-CLASS-250-343
	US-PATENT-CLASS-141-4		US-PATENT-CLASS-250-351
	US-PATENT-CLASS-141-197		US-PATENT-4,055,764
	US-PATENT-CLASS-417-225	c37 N78-13436	NASA-CASE-LEW-12083-1
	US-PATENT-4,051,877		US-PATENT-APPL-SN-659882
c35 N78-10429	NASA-CASE-NPO-13772-1		US-PATENT-CLASS-250-499
	US-PATENT-APPL-SN-675351		US-PATENT-CLASS-313-61S
	US-PATENT-CLASS-250-310		US-PATENT-CLASS-427-124
	US-PATENT-CLASS-250-398		US-PATENT-CLASS-427-126
	US-PATENT-4,052,614		US-PATENT-CLASS-427-248E
c37 N78-10467	NASA-CASE-LEW-12321-1		US-PATENT-CLASS-427-250
	US-PATENT-APPL-SN-596641		US-PATENT-CLASS-427-255
	US-PATENT-CLASS-60-39.28B		US-PATENT-4,055,686
	US-PATENT-CLASS-123-41.33	c44 N78-13526	NASA-CASE-NPO-13482-1
	US-PATENT-CLASS-123-122E		US-PATENT-APPL-SN-495021
	US-PATENT-CLASS-137-104		US-PATENT-CLASS-136-89SJ
	US-PATENT-CLASS-415-180		US-PATENT-CLASS-357-15
	US-PATENT-4,041,697		US-PATENT-CLASS-357-16
c37 N78-10468	NASA-CASE-LEW-12313-1		US-PATENT-CLASS-357-30
	US-PATENT-APPL-SN-581751		US-PATENT-4,053,918
	US-PATENT-CLASS-416-135	c74 N78-13874	NASA-CASE-GSC-12088-1
			US-PATENT-APPL-SN-648700

	US-PATENT-CLASS-356-103		US-PATENT-CLASS-260-2R
	US-PATENT-CLASS-356-104		US-PATENT-CLASS-526-193
	US-PATENT-4,053,229		US-PATENT-CLASS-526-225
c24 N78-14096	NASA-CASE-ARC-11042-1		US-PATENT-CLASS-544-193
	US-PATENT-APPL-SN-734902		US-PATENT-4,061,856
	US-PATENT-CLASS-60-836	c32 N78-15323	NASA-CASE-NPO-13836-1
	US-PATENT-CLASS-252-8.1		US-PATENT-APPL-SN-699002
	US-PATENT-4,061,579		US-PATENT-CLASS-178-69.1
c25 N78-14104	NASA-CASE-ARC-10991-1		US-PATENT-CLASS-325-58
	US-PATENT-APPL-SN-744574		US-PATENT-CLASS-325-63
	US-PATENT-CLASS-204-1806		US-PATENT-CLASS-343-179
	US-PATENT-CLASS-204-299R		US-PATENT-4,061,974
	US-PATENT-4,061,561	c35 N78-15461	NASA-CASE-NPO-13808-1
c27 N78-14164	NASA-CASE-NFO-13867-1		US-PATENT-APPL-SN-675328
	US-PATENT-APPL-SN-692284		US-PATENT-CLASS-250-322
	US-PATENT-CLASS-96-87A		US-PATENT-CLASS-250-416TV
	US-PATENT-CLASS-260-DIG.15		US-PATENT-4,063,092
	US-PATENT-CLASS-427-164	c39 N78-15512	NASA-CASE-LAR-12016-1
	US-PATENT-CLASS-428-411		US-PATENT-APPL-SN-754066
	US-PATENT-CLASS-428-522		US-PATENT-CLASS-73-88F
	US-PATENT-CLASS-428-922		US-PATENT-CLASS-73-579
	US-PATENT-4,061,834		US-PATENT-CLASS-73-630
c35 N78-14364	NASA-CASE-ARC-11046-1		US-PATENT-4,062,227
	US-PATENT-APPL-SN-712419	c44 N78-15560	NASA-CASE-LAR-12009-1
	US-PATENT-CLASS-73-180		US-PATENT-APPL-SN-717320
	US-PATENT-CLASS-340-27SS		US-PATENT-CLASS-126-270
	US-PATENT-4,061,029		US-PATENT-CLASS-126-400
c36 N78-14380	NASA-CASE-MFS-19259-1		US-PATENT-CLASS-237-1A
	US-PATENT-APPL-SN-732630		US-PATENT-4,062,347
	US-PATENT-CLASS-250-571	c74 N78-15879	NASA-CASE-LAR-10385-3
	US-PATENT-CLASS-356-159		US-PATENT-APPL-SN-38816
	US-PATENT-CLASS-356-160		US-PATENT-APPL-SN-370999
	US-PATENT-CLASS-356-199		US-PATENT-CLASS-350-1
	US-PATENT-4,061,427		US-PATENT-CLASS-428-334
c43 N78-14452	NASA-CASE-LEW-12217-1		US-PATENT-CLASS-428-336
	US-PATENT-APPL-SN-763753		US-PATENT-CLASS-428-426
	US-PATENT-CLASS-166-248		US-PATENT-CLASS-428-428
	US-PATENT-CLASS-166-259		US-PATENT-4,062,996
	US-PATENT-4,061,190	c74 N78-15880	NASA-CASE-MFS-22409-2
c44 N78-14625	NASA-CASE-LEW-12039-1		US-PATENT-APPL-SN-445398
	US-PATENT-APPL-SN-668722		US-PATENT-APPL-SN-636193
	US-PATENT-CLASS-320-6		US-PATENT-CLASS-250-272
	US-PATENT-CLASS-320-15		US-PATENT-CLASS-250-320
	US-PATENT-CLASS-320-18		US-PATENT-4,063,086
	US-PATENT-CLASS-320-40	c37 N78-16369	NASA-CASE-NPO-13619-1
	US-PATENT-4,061,955		US-PATENT-APPL-SN-572990
c52 N78-14773	NASA-CASE-LEW-12668-1		US-PATENT-CLASS-74-81
	US-PATENT-APPL-SN-677353		US-PATENT-CLASS-74-83
	US-PATENT-CLASS-128-305		US-PATENT-CLASS-185-38
	US-PATENT-4,061,146		US-PATENT-4,062,245
c54 N78-14784	NASA-CASE-MSC-14632-1	c39 N78-16387	NASA-CASE-LAR-11490-1
	US-PATENT-APPL-SN-571459		US-PATENT-APPL-SN-707125
	US-PATENT-CLASS-23-253A		US-PATENT-CLASS-358-106
	US-PATENT-CLASS-204-180P		US-PATENT-4,063,282
	US-PATENT-CLASS-204-301	c04 N78-17031	NASA-CASE-XNP-01456
	US-PATENT-CLASS-210-96M		US-PATENT-APPL-SN-160093
	US-PATENT-CLASS-210-192		US-PATENT-CLASS-235-70
	US-PATENT-4,061,570		US-PATENT-3,229,905
c71 N78-14867	NASA-CASE-LAR-12106-1	c07 N78-17055	NASA-CASE-LEW-12317-1
	US-PATENT-APPL-SN-740156		US-PATENT-APPL-SN-581750
	US-PATENT-CLASS-73-646		US-PATENT-CLASS-60-204
	US-PATENT-CLASS-330-52		US-PATENT-CLASS-60-226R
	US-PATENT-4,061,041		US-PATENT-CLASS-60-271
c74 N78-14889	NASA-CASE-KSC-11047-1		US-PATENT-4,068,469
	US-PATENT-APPL-SN-715485	c07 N78-17056	NASA-CASE-LEW-12390-1
	US-PATENT-CLASS-179-91R		US-PATENT-APPL-SN-522109
	US-PATENT-CLASS-250-199		US-PATENT-CLASS-60-226R
	US-PATENT-CLASS-358-142		US-PATENT-CLASS-74-385
	US-PATENT-4,061,577		US-PATENT-CLASS-74-417
c24 N78-15180	NASA-CASE-ARC-10913-1		US-PATENT-4,068,470
	US-PATENT-APPL-SN-698646	c17 N78-17140	NASA-CASE-HQN-10880-1
	US-PATENT-CLASS-106-15PF		US-PATENT-APPL-SN-595254
	US-PATENT-CLASS-260-2.5N		US-PATENT-CLASS-325-66
	US-PATENT-CLASS-260-2.5R		US-PATENT-CLASS-325-118
	US-PATENT-CLASS-428-71		US-PATENT-CLASS-343-112R
	US-PATENT-CLASS-428-73		US-PATENT-CLASS-343-225
	US-PATENT-CLASS-428-117		US-PATENT-CLASS-362-269
	US-PATENT-CLASS-428-290		US-PATENT-4,067,015
	US-PATENT-CLASS-428-920	c24 N78-17149	NASA-CASE-LAR-11898-2
	US-PATENT-4,061,812		US-PATENT-APPL-SN-723264
c25 N78-15210	NASA-CASE-LAR-12046-1		US-PATENT-APPL-SN-799024
	US-PATENT-APPL-SN-755310		US-PATENT-CLASS-156-245
	US-PATENT-CLASS-23-230PC		US-PATENT-CLASS-156-285
	US-PATENT-CLASS-23-232E		US-PATENT-CLASS-156-289
	US-PATENT-CLASS-23-232R		US-PATENT-CLASS-428-116
	US-PATENT-CLASS-73-23		US-PATENT-CLASS-428-902
	US-PATENT-4,062,650		US-PATENT-4,063,981
c27 N78-15276	NASA-CASE-LEW-12053-1	c24 N78-17150	NASA-CASE-LAR-12019-1
	US-PATENT-APPL-SN-513613		US-PATENT-APPL-SN-792067

	US-PATENT-CLASS-156-154	c34 N78-17335	NASA-CASE-LEW-12508-1
	US-PATENT-CLASS-156-264		US-PATENT-APPL-SN-746580
	US-PATENT-CLASS-156-285		US-PATENT-CLASS-62-3
	US-PATENT-CLASS-156-286		US-PATENT-4,069,028
	US-PATENT-CLASS-156-289	c34 N78-17336	NASA-CASE-ARC-10198
	US-PATENT-CLASS-156-300		US-PATENT-APPL-SN-42088
	US-PATENT-CLASS-156-306		US-PATENT-CLASS-165-105
	US-PATENT-CLASS-156-311		US-PATENT-CLASS-165-134
	US-PATENT-CLASS-264-90		US-PATENT-3,777,811
	US-PATENT-CLASS-264-157	c34 N78-17337	NASA-CASE-ARC-10199
	US-PATENT-CLASS-428-294		US-PATENT-APPL-SN-824628
	US-PATENT-CLASS-428-302		US-PATENT-CLASS-2-2.1
	US-PATENT-4,065,340		US-PATENT-CLASS-165-32
c27 N78-17205	NASA-CASE-LAR-12181-1		US-PATENT-CLASS-165-96
	US-PATENT-APPL-SN-532784		US-PATENT-CLASS-165-105
	US-PATENT-APPL-SN-734901	c35 N78-17357	US-PATENT-3,543,839
	US-PATENT-CLASS-156-309		NASA-CASE-MFS-23194-1
	US-PATENT-CLASS-156-331		US-PATENT-APPL-SN-629458
	US-PATENT-CLASS-260-30.4N		US-PATENT-CLASS-350-3.5
	US-PATENT-CLASS-260-32.2N		US-PATENT-4,065,202
	US-PATENT-CLASS-260-32.6NT	c35 N78-17358	NASA-CASE-MSC-11242
	US-PATENT-CLASS-260-33.4N		US-PATENT-APPL-SN-636796
	US-PATENT-4,065,345		US-PATENT-CLASS-73-67.2
c27 N78-17206	NASA-CASE-LAR-11902-1		US-PATENT-3,492,858
	US-PATENT-APPL-SN-672695	c35 N78-17359	NASA-CASE-NPO-11150
	US-PATENT-CLASS-60-200A		US-PATENT-APPL-SN-858950
	US-PATENT-CLASS-75-229		US-PATENT-CLASS-338-36
	US-PATENT-CLASS-75-239		US-PATENT-CLASS-338-99
	US-PATENT-CLASS-75-241		US-PATENT-CLASS-338-100
	US-PATENT-CLASS-106-43		US-PATENT-3,641,470
	US-PATENT-4,067,742	c36 N78-17366	NASA-CASE-MFS-22597
c27 N78-17213	NASA-CASE-MSC-14331-2		US-PATENT-APPL-SN-395895
	US-PATENT-APPL-SN-657907		US-PATENT-CLASS-315-108
	US-PATENT-CLASS-260-75NH		US-PATENT-CLASS-331-94.56
	US-PATENT-CLASS-260-75NK		US-PATENT-CLASS-331-94.5T
	US-PATENT-CLASS-260-75NT		US-PATENT-3,882,417
	US-PATENT-CLASS-260-77.5AN	c37 N78-17383	NASA-CASE-MSC-19666-1
	US-PATENT-CLASS-260-77.5AN		US-PATENT-APPL-SN-721150
	US-PATENT-CLASS-260-77.5AP		US-PATENT-CLASS-51-235
	US-PATENT-CLASS-260-77.5AT		US-PATENT-CLASS-118-50
	US-PATENT-CLASS-260-77.55P		US-PATENT-CLASS-118-500
	US-PATENT-4,069,212		US-PATENT-CLASS-248-36-3
c27 N78-17214	NASA-CASE-NPO-10557		US-PATENT-CLASS-269-21
	US-PATENT-APPL-SN-759220		US-PATENT-CLASS-279-3
	US-PATENT-CLASS-260-67		US-PATENT-4,066,039
	US-PATENT-3,538,053	c37 N78-17384	NASA-CASE-LEW-12916-1
c27 N78-17215	NASA-CASE-NPO-13764-1		US-PATENT-APPL-SN-583056
	US-PATENT-APPL-SN-674194		US-PATENT-CLASS-60-261
	US-PATENT-CLASS-3-1.9		US-PATENT-CLASS-60-262
	US-PATENT-CLASS-128-92C		US-PATENT-CLASS-60-271
	US-PATENT-CLASS-128-92G		US-PATENT-4,064,692
	US-PATENT-CLASS-260-42.17	c37 N78-17385	NASA-CASE-MSC-00625
	US-PATENT-4,064,566		US-PATENT-APPL-SN-362278
c31 N78-17237	NASA-CASE-LEW-11981-1		US-PATENT-CLASS-74-800
	US-PATENT-APPL-SN-672220		US-PATENT-3,306,134
	US-PATENT-CLASS-62-376	c37 N78-17386	NASA-CASE-NPO-10151
	US-PATENT-CLASS-62-514R		US-PATENT-APPL-SN-365244
	US-PATENT-CLASS-313-22		US-PATENT-CLASS-328-233
	US-PATENT-4,068,495		US-PATENT-3,387,218
c31 N78-17238	NASA-CASE-NPO-11978	c38 N78-17395	NASA-CASE-NPO-13283
	US-PATENT-APPL-SN-264268		US-PATENT-APPL-SN-401225
	US-PATENT-CLASS-313-175		US-PATENT-CLASS-235-151.3
	US-PATENT-CLASS-313-176		US-PATENT-CLASS-235-156
	US-PATENT-CLASS-313-180		US-PATENT-CLASS-235-181
	US-PATENT-CLASS-313-184		US-PATENT-CLASS-250-572
	US-PATENT-CLASS-313-224		US-PATENT-CLASS-356-237
	US-PATENT-3,769,544		US-PATENT-3,908,118
c33 N78-17293	NASA-CASE-XLE-06094	c38 N78-17396	NASA-CASE-NPO-13282
	US-PATENT-APPL-SN-523632		US-PATENT-APPL-SN-401224
	US-PATENT-CLASS-315-22		US-PATENT-CLASS-235-151.3
	US-PATENT-3,423,627		US-PATENT-CLASS-235-156
c33 N78-17294	NASA-CASE-MSC-11235		US-PATENT-CLASS-250-563
	US-PATENT-APPL-SN-698239		US-PATENT-CLASS-250-572
	US-PATENT-CLASS-307-270		US-PATENT-CLASS-356-165
	US-PATENT-CLASS-307-297		US-PATENT-CLASS-356-237
	US-PATENT-CLASS-323-4		US-PATENT-3,909,602
	US-PATENT-CLASS-328-172	c44 N78-17460	NASA-CASE-NPO-13579-1
	US-PATENT-3,573,504		US-PATENT-APPL-SN-598969
c33 N78-17295	NASA-CASE-XGS-09186		US-PATENT-CLASS-60-641
	US-PATENT-APPL-SN-669911		US-PATENT-CLASS-62-4
	US-PATENT-CLASS-323-18		US-PATENT-CLASS-126-263
	US-PATENT-3,475,675		US-PATENT-CLASS-126-271
c33 N78-17296	NASA-CASE-GSC-10135		US-PATENT-CLASS-165-2
	US-PATENT-APPL-SN-764823		US-PATENT-CLASS-237-1A
	US-PATENT-CLASS-307-53		US-PATENT-4,065,053
	US-PATENT-CLASS-307-69	c54 N78-17675	NASA-CASE-ARC-11101-1
	US-PATENT-CLASS-320-53		US-PATENT-APPL-SN-753976
	US-PATENT-CLASS-323-19		US-PATENT-CLASS-2-2.1A
	US-PATENT-3,600,599		US-PATENT-CLASS-36-92

c54 N78-17676	US-PATENT-CLASS-36-119 US-PATENT-4,064,642 NASA-CASE-MPS-23311-1 US-PATENT-APPL-SN-708800 US-PATENT-CLASS-3-12.5 US-PATENT-CLASS-74-515E US-PATENT-CLASS-214-1CM US-PATENT-4,068,763	c34 N78-18355	NASA-CASE-LEW-12554-1 US-PATENT-APPL-SN-686449 US-PATENT-CLASS-427-34 US-PATENT-CLASS-427-405 US-PATENT-CLASS-427-419A US-PATENT-CLASS-427-423 US-PATENT-CLASS-428-633 US-PATENT-CLASS-428-652 US-PATENT-CLASS-428-667 US-PATENT-4,055,705
c54 N78-17677	NASA-CASE-MSC-13054 US-PATENT-APPL-SN-585217 US-PATENT-CLASS-2-161 US-PATENT-3,490,074	c35 N78-19390	NASA-CASE-MPS-23008-1 US-PATENT-APPL-SN-665734 US-PATENT-CLASS-73-DIG.11 US-PATENT-CLASS-73-28 US-PATENT-CLASS-73-432PS US-PATENT-CLASS-73-432E US-PATENT-4,055,089
c54 N78-17678	NASA-CASE-XMS-04670 US-PATENT-APPL-SN-535169 US-PATENT-CLASS-2-2.1 US-PATENT-3,48E,771	c35 N78-18391	NASA-CASE-NPO-13687-1 US-PATENT-APPL-SN-641803 US-PATENT-CLASS-356-106S US-PATENT-CLASS-356-110 US-PATENT-4,053,231
c54 N78-17679	NASA-CASE-XMS-04928 US-PATENT-APPL-SN-584914 US-PATENT-CLASS-98-1 US-PATENT-3,487,765	c35 N78-18395	NASA-CASE-NPO-13999-1 US-PATENT-APPL-SN-858596
c54 N78-17680	NASA-CASE-XMS-C9653 US-PATENT-APPL-SN-538863 US-PATENT-CLASS-2-6 US-PATENT-3,359,568	c36 N78-18410	NASA-CASE-NPO-13801-1 US-PATENT-APPL-SN-708796 US-PATENT-CLASS-330-4 US-PATENT-CLASS-332-7.5 US-PATENT-4,055,810
c60 N78-17691	NASA-CASE-GSC-12044-1 US-PATENT-APPL-SN-631341 US-PATENT-CLASS-340-347DD US-PATENT-4,069,478	c54 N78-18761	NASA-CASE-MSC-10954-1 US-PATENT-APPL-SN-529884 US-PATENT-CLASS-2-2.1 US-PATENT-3,514,785
c74 N78-17865	NASA-CASE-MSC-12618-1 US-PATENT-APPL-SN-651007 US-PATENT-CLASS-350-159 US-PATENT-CLASS-358-41 US-PATENT-CLASS-358-55 US-PATENT-CLASS-358-225 US-PATENT-4,067,043	c74 N78-18905	NASA-CASE-GSC-12010-1 US-PATENT-APPL-SN-680958 US-PATENT-CLASS-250-213VT US-PATENT-CLASS-313-94 US-PATENT-CLASS-313-442 US-PATENT-4,070,574
c74 N78-17866	NASA-CASE-LAR-11711-1 US-PATENT-APPL-SN-674195 US-PATENT-CLASS-250-201 US-PATENT-CLASS-350-204 US-PATENT-CLASS-356-28 US-PATENT-4,063,814	c27 N78-19302	NASA-CASE-NPO-13690-1 US-PATENT-APPL-SN-633876 US-PATENT-CLASS-106-39.5 US-PATENT-CLASS-106-65 US-PATENT-CLASS-106-73.5 US-PATENT-4,072,532
c74 N78-17867	NASA-CASE-NPO-13759-1 US-PATENT-APPL-SN-718266 US-PATENT-CLASS-250-344 US-PATENT-CLASS-356-204 US-PATENT-CLASS-356-246 US-PATENT-4,067,653	c35 N78-19465	NASA-CASE-ARC-10896-1 US-PATENT-APPL-SN-615030 US-PATENT-CLASS-73-23 US-PATENT-4,055,072
c05 N78-18045	NASA-CASE-LAR-11688-1 US-PATENT-APPL-SN-878540	c35 N78-19466	NASA-CASE-ARC-10820-1 US-PATENT-APPL-SN-620675 US-PATENT-CLASS-119-51.11 US-PATENT-CLASS-119-72.5 US-PATENT-CLASS-137-624.11 US-PATENT-4,055,147
c07 N78-18066	NASA-CASE-LEW-12389-2 US-PATENT-APPL-SN-628221 US-PATENT-CLASS-60-39.31 US-PATENT-CLASS-60-226B US-PATENT-CLASS-244-53A US-PATENT-CLASS-244-54 US-PATENT-4,055,041	c44 N78-19599	NASA-CASE-LEW-12159-1 US-PATENT-APPL-SN-643041 US-PATENT-CLASS-126-270 US-PATENT-CLASS-427-160 US-PATENT-CLASS-428-652 US-PATENT-CLASS-428-667 US-PATENT-CLASS-428-679 US-PATENT-4,055,707
c07 N78-18067	NASA-CASE-LEW-12917-1 US-PATENT-APPL-SN-583055 US-PATENT-CLASS-60-204 US-PATENT-CLASS-60-262 US-PATENT-4,069,661	c44 N78-19609	NASA-CASE-NPO-14068-1 US-PATENT-APPL-SN-858769
c09 N78-18083	NASA-CASE-ARC-10903-1 US-PATENT-APPL-SN-623536 US-PATENT-CLASS-35-12N US-PATENT-CLASS-358-104 US-PATENT-4,055,004	c73 N78-19920	NASA-CASE-HQN-10841-1 US-PATENT-APPL-SN-560891 US-PATENT-CLASS-176-39 US-PATENT-CLASS-330-4.3 US-PATENT-4,075,057
c26 N78-18182	NASA-CASE-LEW-12095-1 US-PATENT-APPL-SN-651009 US-PATENT-CLASS-75-124 US-PATENT-CLASS-75-126D US-PATENT-CLASS-75-126F US-PATENT-CLASS-75-128G US-PATENT-CLASS-75-128T US-PATENT-4,055,416	c23 N78-22154	NASA-CASE-ARC-11097-1 US-PATENT-APPL-SN-891872
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	US-PATENT-4, 150, 425		US-PATENT-APPL-SN-506803
c33 N79-24257	NASA-CASE-NPC-14056-1		US-PATENT-APPL-SN-645502
	US-PATENT-APPL-SN-833637		US-PATENT-CLASS-65-43
	US-PATENT-CLASS-363-71		US-PATENT-CLASS-156-89
	US-PATENT-CLASS-363-95		US-PATENT-CLASS-220-2, 2
	US-PATENT-CLASS-363-134		US-PATENT-3, 859, 714
	US-PATENT-4, 149, 233		US-PATENT-4, 155, 475
c33 N79-24260	NASA-CASE-GSC-12410-1	c33 N79-25313	NASA-CASE-KSC-11099-1
	US-PATENT-APPL-SN-32306		US-PATENT-APPL-SN-043945
c34 N79-24285	NASA-CASE-MSC-16841-1	c33 N79-25314	NASA-CASE-NPO-14410-1
	US-PATENT-APPL-SN-853382		US-PATENT-APPL-SN-044425
	US-PATENT-CLASS-73-714	c39 N79-25424	NASA-CASE-FRC-11026-1
	US-PATENT-CLASS-210-108		US-PATENT-APPL-SN-043944
	US-PATENT-CLASS-210-142	c43 N79-25443	NASA-CASE-MFS-23720-3
	US-PATENT-4, 151, 086		US-PATENT-APPL-SN-848420
c44 N79-24431	NASA-CASE-NPC-13652-2		US-PATENT-CLASS-73-12
	US-PATENT-APPL-SN-848794		US-PATENT-CLASS-73-82
	US-PATENT-CLASS-29-57-4		US-PATENT-4, 154, 084
	US-PATENT-CLASS-29-572	c44 N79-25481	NASA-CASE-LEW-12972-1
	US-PATENT-CLASS-29-739		US-PATENT-APPL-SN-897829
	US-PATENT-CLASS-29-809		US-PATENT-CLASS-429-253
	US-PATENT-CLASS-228-5, 1		US-PATENT-CLASS-526-7
	US-PATENT-CLASS-228-6		US-PATENT-CLASS-526-9
	US-PATENT-4, 149, 665		US-PATENT-4, 154, 912
c44 N79-24432	NASA-CASE-NPO-13579-3	c44 N79-25482	NASA-CASE-NPO-14199-1
	US-PATENT-APPL-SN-762363		NASA-CASE-NPO-14200-1
	US-PATENT-CLASS-126-270		US-PATENT-APPL-SN-891243
	US-PATENT-CLASS-264-1		US-PATENT-CLASS-136-89CA
	US-PATENT-CLASS-264-33		US-PATENT-CLASS-136-89CC
	US-PATENT-CLASS-264-34		US-PATENT-CLASS-136-89PC

	US-PATENT-CLASS-136-89SJ		US-PATENT-4,033,286
	US-PATENT-4,153,476	c27 N79-28307	NASA-CASE-LEW-12053-2
c74 N79-25876	NASA-CASE-LAR-12007-2		US-PATENT-APPL-SN-796263
	US-PATENT-APPL-SN-030964		US-PATENT-CLASS-260-37N
c12 N79-26075	NASA-CASE-MPS-23460-1		US-PATENT-CLASS-260-42
	US-PATENT-APPL-SN-746578		US-PATENT-CLASS-260-53
	US-PATENT-CLASS-13-20		US-PATENT-CLASS-528-126
	US-PATENT-CLASS-13-22		US-PATENT-CLASS-528-127
	US-PATENT-CLASS-13-24		US-PATENT-CLASS-528-128
	US-PATENT-CLASS-219-410		US-PATENT-CLASS-528-221
	US-PATENT-4,158,742		US-PATENT-CLASS-528-223
c15 N79-26100	NASA-CASE-ARC-11104-1		US-PATENT-CLASS-528-225
	US-PATENT-APPL-SN-854920		US-PATENT-CLASS-528-227
	US-PATENT-CLASS-244-121		US-PATENT-CLASS-528-229
	US-PATENT-CLASS-260-37EP		US-PATENT-CLASS-528-331
	US-PATENT-CLASS-260-830S		US-PATENT-CLASS-528-336
	US-PATENT-CLASS-264-102		US-PATENT-CLASS-528-337
	US-PATENT-CLASS-264-145		US-PATENT-CLASS-528-338
	US-PATENT-CLASS-264-151		US-PATENT-CLASS-528-342
	US-PATENT-CLASS-264-175		US-PATENT-CLASS-544-193
	US-PATENT-CLASS-264-236		US-PATENT-4,159,262
	US-PATENT-CLASS-426-220	c28 N79-28342	NASA-CASE-NPO-14260-1
	US-PATENT-CLASS-428-413		US-PATENT-APPL-SN-861390
	US-PATENT-CLASS-428-414		US-PATENT-CLASS-149-19.4
	US-PATENT-CLASS-428-418		US-PATENT-CLASS-149-19.9
	US-PATENT-CLASS-428-421		US-PATENT-CLASS-149-20
	US-PATENT-CLASS-428-920		US-PATENT-4,158,583
	US-PATENT-4,156,752	c31 N79-28370	NASA-CASE-MPS-23721-1
c32 N79-26253	NASA-CASE-NPO-14361-1		US-PATENT-APPL-SN-847277
	US-PATENT-APPL-SN-053572		US-PATENT-CLASS-343-5NA
c35 N79-26372	NASA-CASE-LAR-11889-1		US-PATENT-CLASS-343-14
	US-PATENT-APPL-SN-662182		US-PATENT-4,161,731
	US-PATENT-CLASS-73-178R	c32 N79-28383	NASA-CASE-KSC-11025-1
	US-PATENT-CLASS-308-10		US-PATENT-APPL-SN-061327
	US-PATENT-4,156,548	c33 N79-28415	NASA-CASE-MSC-16697-1
c36 N79-26385	NASA-CASE-LAR-12592-1		US-PATENT-APPL-SN-885067
	US-PATENT-APPL-SN-041141		US-PATENT-CLASS-307-98
c43 N79-26439	NASA-CASE-MPS-23726-1		US-PATENT-CLASS-307-119
	US-PATENT-APPL-SN-848418		US-PATENT-CLASS-361-170
	US-PATENT-CLASS-33-1N		US-PATENT-4,161,661
	US-PATENT-CLASS-33-1Q	c33 N79-28416	NASA-CASE-GSC-12171-1
	US-PATENT-CLASS-33-174L		US-PATENT-APPL-SN-878542
	US-PATENT-CLASS-105-161		US-PATENT-CLASS-343-909
	US-PATENT-CLASS-299-1		US-PATENT-4,160,254
	US-PATENT-CLASS-364-560	c35 N79-28527	NASA-CASE-NPO-13953-1
	US-PATENT-4,156,971		US-PATENT-APPL-SN-880727
c44 N79-26474	NASA-CASE-LEW-13150-1		US-PATENT-CLASS-356-237
	US-PATENT-APPL-SN-914260		US-PATENT-CLASS-356-404
	US-PATENT-CLASS-429-15		US-PATENT-4,160,601
	US-PATENT-CLASS-429-101	c37 N79-28549	NASA-CASE-GSC-12297-1
	US-PATENT-4,159,366		US-PATENT-APPL-SN-880838
c44 N79-26475	NASA-CASE-MPS-23540-1		US-PATENT-CLASS-165-105
	US-PATENT-APPL-SN-863773		US-PATENT-CLASS-357-74
	US-PATENT-CLASS-29-572		US-PATENT-CLASS-357-79
	US-PATENT-CLASS-29-577		US-PATENT-CLASS-357-81
	US-PATENT-CLASS-29-578		US-PATENT-CLASS-357-82
	US-PATENT-CLASS-29-580		US-PATENT-CLASS-357-83
	US-PATENT-CLASS-357-45		US-PATENT-4,161,747
	US-PATENT-4,156,309	c37 N79-28550	NASA-CASE-GSC-12274-1
c52 N79-26771	NASA-CASE-ARC-10994-2		US-PATENT-APPL-SN-909100
	US-PATENT-APPL-SN-759965		US-PATENT-CLASS-72-436
	US-PATENT-CLASS-73-626		US-PATENT-CLASS-72-451
	US-PATENT-CLASS-128-660		US-PATENT-CLASS-72-470
	US-PATENT-4,154,230		US-PATENT-CLASS-251-7
c52 N79-26772	NASA-CASE-KSC-11169-1		US-PATENT-4,159,634
	US-PATENT-APPL-SN-876438	c37 N79-28551	NASA-CASE-ARC-11052-1
	US-PATENT-CLASS-3-1.9		US-PATENT-APPL-SN-826202
	US-PATENT-CLASS-3-2		US-PATENT-CLASS-414-4
	US-PATENT-CLASS-3-12		US-PATENT-4,160,508
	US-PATENT-4,158,895	c44 N79-29608	NASA-CASE-LAR-12148-1
c33 N79-27395	NASA-CASE-FRC-11014-1		US-PATENT-APPL-SN-051275
	US-PATENT-APPL-SN-053652	c27 N79-30375	NASA-CASE-ARC-11243-1
c52 N79-27836	NASA-CASE-NFO-13910-1		US-PATENT-APPL-SN-054502
	US-PATENT-APPL-SN-712270	c27 N79-30376	NASA-CASE-ARC-11244-1
	US-PATENT-CLASS-128-329R		US-PATENT-APPL-SN-054501
	US-PATENT-CLASS-128-639	c09 N79-31228	NASA-CASE-LAR-12149-2
	US-PATENT-4,154,228		US-PATENT-APPL-SN-829314
c60 N79-27864	NASA-CASE-GSC-12223-1		US-PATENT-APPL-SN-928131
	US-PATENT-APPL-SN-041143		US-PATENT-CLASS-35-12E
c25 N79-28253	NASA-CASE-NPO-13650-1		US-PATENT-CLASS-35-12H
	US-PATENT-APPL-SN-704468		US-PATENT-4,164,079
	US-PATENT-CLASS-23-252R	c24 N79-31347	NASA-CASE-GSC-12303-1
	US-PATENT-CLASS-118-49		US-PATENT-APPL-SN-862880
	US-PATENT-CLASS-248		US-PATENT-CLASS-106-74
	US-PATENT-CLASS-253		US-PATENT-CLASS-106-84
	US-PATENT-CLASS-337		US-PATENT-4,162,169
	US-PATENT-CLASS-349	c33 N79-31498	NASA-CASE-ARC-11116-1
	US-PATENT-CLASS-423-33-5		US-PATENT-APPL-SN-069485
	US-PATENT-CLASS-427-95	c34 N79-31523	NASA-CASE-GSC-12253-1

	US-PATENT-APPL-SN-853677		US-PATENT-APPL-SN-907435
	US-PATENT-CLASS-165-32		US-PATENT-CLASS-260-926
	US-PATENT-CLASS-165-105		US-PATENT-4,092,466
	US-PATENT-CLASS-244-18		US-PATENT-4,168,287
	US-PATENT-CLASS-244-163	c28 N80-10374	NASA-CASE-NPO-13849-1
	US-PATENT-4,162,701		NASA-CASE-NPO-13907-1
c43 N79-31706	NASA-CASE-MFS-23725-1		US-PATENT-APPL-SN-668783
	US-PATENT-APPL-SN-848793		US-PATENT-CLASS-23-288B
	US-PATENT-CLASS-250-253		US-PATENT-CLASS-48-DIG.8
	US-PATENT-CLASS-250-272		US-PATENT-CLASS-48-10-3
	US-PATENT-4,165,460		US-PATENT-CLASS-48-61
c44 N79-31752	NASA-CASE-NFO-14205-1		US-PATENT-CLASS-48-102A
	US-PATENT-APPL-SN-920879		US-PATENT-CLASS-48-107
	US-PATENT-CLASS-25-572		US-PATENT-CLASS-48-117
	US-PATENT-CLASS-25-589		US-PATENT-CLASS-60-300
	US-PATENT-CLASS-106-1		US-PATENT-CLASS-60-606
	US-PATENT-CLASS-106-1.2		US-PATENT-CLASS-123-DIG.12
	US-PATENT-CLASS-136-89CC		US-PATENT-CLASS-123-3
	US-PATENT-CLASS-252-514		US-PATENT-CLASS-123-179B
	US-PATENT-CLASS-357-30		US-PATENT-CLASS-423-650
	US-PATENT-CLASS-357-65		US-PATENT-4,033,133
	US-PATENT-CLASS-357-67	c37 N80-10494	NASA-CASE-NPO-14384-1
	US-PATENT-CLASS-427-88		US-PATENT-APPL-SN-880728
	US-PATENT-4,163,678		US-PATENT-CLASS-210-186
c44 N79-31753	NASA-CASE-NFO-14467-1		US-PATENT-CLASS-210-340
	US-PATENT-APPL-SN-946994		US-PATENT-CLASS-239-102
	US-PATENT-CLASS-136-89PC		US-PATENT-CLASS-239-302
	US-PATENT-4,162,928		US-PATENT-CLASS-422-187
c33 N79-32463	NASA-CASE-LEW-13282-1		US-PATENT-CLASS-422-199
	US-PATENT-APPL-SN-073579		US-PATENT-CLASS-422-208
c60 N79-32852	NASA-CASE-GSC-12319-1		US-PATENT-CLASS-422-235
	US-PATENT-APPL-SN-054538		US-PATENT-CLASS-422-242
c09 N79-33220	NASA-CASE-ARC-11158-1		US-PATENT-CLASS-423-350
	US-PATENT-APPL-SN-053566		US-PATENT-4,169,129
c27 N79-33316	NASA-CASE-LAR-12054-1	c39 N80-10507	NASA-CASE-NPO-14192-1
	US-PATENT-APPL-SN-839963		US-PATENT-APPL-SN-830562
	US-PATENT-CLASS-264-137		US-PATENT-CLASS-181-102
	US-PATENT-CLASS-428-474		US-PATENT-CLASS-181-105
	US-PATENT-CLASS-528-229		US-PATENT-CLASS-367-26
	US-PATENT-4,166,170		US-PATENT-CLASS-467-28
c33 N79-33392	NASA-CASE-XMF-04494-1		US-PATENT-4,168,483
	US-PATENT-APPL-SN-547643	c46 N80-10709	NASA-CASE-NPO-14231-1
	US-PATENT-CLASS-260-83		US-PATENT-APPL-SN-903019
	US-PATENT-3,378,657		US-PATENT-CLASS-73-155
c33 N79-33393	NASA-CASE-XMS-01244-1		US-PATENT-CLASS-175-78
	US-PATENT-APPL-SN-20370		US-PATENT-4,167,111
	US-PATENT-CLASS-200-114	c54 N80-10799	NASA-CASE-MSC-16182-1
	US-PATENT-3,123,692		US-PATENT-APPL-SN-780938
c35 N79-33449	NASA-CASE-XGS-01245-1		US-PATENT-CLASS-128-142B
	US-PATENT-APPL-SN-134619		US-PATENT-CLASS-128-191E
	US-PATENT-CLASS-338-18		US-PATENT-CLASS-128-212
	US-PATENT-3,119,086		US-PATENT-4,168,706
c35 N79-33450	NASA-CASE-XGS-01293-1	c05 N80-11065	NASA-CASE-LAR-12412-1
	US-PATENT-APPL-SN-150690		US-PATENT-APPL-SN-067595
	US-PATENT-CLASS-73-400	c33 N80-11326	NASA-CASE-ARC-11245-1
	US-PATENT-3,190,124		US-PATENT-APPL-SN-088663
c37 N79-33467	NASA-CASE-XMS-01077-1	c37 N80-11468	NASA-CASE-LAR-12540-1
	US-PATENT-APPL-SN-228049		US-PATENT-APPL-SN-069429
	US-PATENT-CLASS-312-319	c37 N80-11469	NASA-CASE-LAR-12595-1
	US-PATENT-3,123,418		US-PATENT-APPL-SN-070774
c37 N79-33468	NASA-CASE-HQN-00573-1	c24 N80-12117	NASA-CASE-LAR-12620-1
	US-PATENT-APPL-SN-129379		US-PATENT-APPL-SN-072857
	US-PATENT-CLASS-137-14	c32 N80-12256	NASA-CASE-NPO-14632-1
	US-PATENT-3,134,389		US-PATENT-APPL-SN-092143
c37 N79-33469	NASA-CASE-XGS-01286-1	c37 N80-12414	NASA-CASE-LEW-12989-1
	US-PATENT-APPL-SN-142583		US-PATENT-APPL-SN-092145
	US-PATENT-CLASS-251-172	c74 N80-12866	NASA-CASE-LAR-12328-1
	US-PATENT-3,233,862		US-PATENT-APPL-SN-073477
c74 N79-34011	NASA-CASE-NFO-14066-1	c05 N80-14107	NASA-CASE-ARC-11106-1
	US-PATENT-APPL-SN-827464		US-PATENT-APPL-SN-831633
	US-PATENT-CLASS-250-216		US-PATENT-CLASS-415-199
	US-PATENT-CLASS-250-551		US-PATENT-CLASS-416-226
	US-PATENT-4,166,959		US-PATENT-CLASS-416-238
c74 N79-34014	NASA-CASE-NPO-14544-1		US-PATENT-4,168,939
	NASA-CASE-NPO-14545-1	c18 N80-14183	NASA-CASE-GSC-12331-1
	NASA-CASE-NPO-14546-1		US-PATENT-APPL-SN-943088
	NASA-CASE-NPO-14547-1		US-PATENT-CLASS-343-880
	US-PATENT-APPL-SN-078612		US-PATENT-CLASS-343-883
c20 N80-10278	NASA-CASE-MFS-23642-1		US-PATENT-4,176,360
	US-PATENT-APPL-SN-923758	c20 N80-14188	NASA-CASE-XLE-02062-1
	US-PATENT-CLASS-137-177		US-PATENT-APPL-SN-545793
	US-PATENT-CLASS-137-209		US-PATENT-CLASS-60-203
	US-PATENT-CLASS-137-574		US-PATENT-CLASS-60-259
	US-PATENT-CLASS-137-576		US-PATENT-4,171,615
	US-PATENT-CLASS-137-590	c26 N80-14229	NASA-CASE-NPO-14474-1
	US-PATENT-CLASS-244-135B		US-PATENT-APPL-SN-918537
	US-PATENT-4,168,718		US-PATENT-CLASS-423-149
c27 N80-10358	NASA-CASE-MSC-14903-2		US-PATENT-CLASS-423-293
	US-PATENT-APPL-SN-706424		US-PATENT-CLASS-423-348

	US-PATENT-CLASS-423-417		US-PATENT-CLASS-343-100ME
	US-PATENT-CLASS-423-625		US-PATENT-CLASS-343-112D
	US-PATENT-4,172,883		US-PATENT-4,170,776
c26 N80-14232	NASA-CASE-LEW-13169-1	c52 N80-14684	NASA-CASE-LEW-12955-1
	US-PATENT-APPL-SN-102003		US-PATENT-APPL-SN-829318
c32 N80-14281	NASA-CASE-NPO-13830-1		US-PATENT-CLASS-128-276
	US-PATENT-APPL-SN-763905		US-PATENT-4,157,718
	US-PATENT-APPL-SN-834257	c52 N80-14687	NASA-CASE-NPO-14101-1
	US-PATENT-CLASS-333-818		US-PATENT-APPL-SN-772434
	US-PATENT-CLASS-343-18A		US-PATENT-CLASS-210-22
	US-PATENT-CLASS-343-909		US-PATENT-CLASS-210-321B
	US-PATENT-4,164,718		US-PATENT-4,094,775
c33 N80-14330	NASA-CASE-NPO-10857-1	c72 N80-14877	NASA-CASE-NPO-14078-1
	US-PATENT-APPL-SN-888362		US-PATENT-APPL-SN-856466
	US-PATENT-CLASS-315-145		US-PATENT-CLASS-250-281
	US-PATENT-CLASS-315-260		US-PATENT-CLASS-250-282
	US-PATENT-CLASS-315-334		US-PATENT-CLASS-250-423P
	US-PATENT-3,635,537		US-PATENT-4,158,775
c33 N80-14332	NASA-CASE-NPO-14250-1	c05 N80-16055	NASA-CASE-LAR-12175-1
	US-PATENT-APPL-SN-921627		US-PATENT-APPL-SN-079913
	US-PATENT-CLASS-250-310	c25 N80-16116	NASA-CASE-ARC-11107-1
	US-PATENT-CLASS-250-492A		US-PATENT-APPL-SN-883961
	US-PATENT-CLASS-324-158T		US-PATENT-CLASS-521-124
	US-PATENT-4,172,228		US-PATENT-CLASS-521-125
c35 N80-14371	NASA-CASE-LAR-11690-1		US-PATENT-CLASS-521-127
	US-PATENT-APPL-SN-928129		US-PATENT-CLASS-521-157
	US-PATENT-CLASS-73-655		US-PATENT-CLASS-528-73
	US-PATENT-CLASS-73-661		US-PATENT-4,177,333
	US-PATENT-4,171,645	c27 N80-16158	NASA-CASE-LAR-12099-1
c36 N80-14384	NASA-CASE-GSC-12237-1		US-PATENT-APPL-SN-906299
	US-PATENT-APPL-SN-837795		US-PATENT-CLASS-528-207
	US-PATENT-CLASS-331-94.5C		US-PATENT-CLASS-528-206
	US-PATENT-CLASS-331-94.5P		US-PATENT-4,180,648
	US-PATENT-4,173,001	c27 N80-16163	NASA-CASE-NPO-14021-2
c37 N80-14395	NASA-CASE-INE-08835-1		US-PATENT-APPL-SN-106188
	US-PATENT-APPL-SN-534931	c32 N80-16261	NASA-CASE-NPO-14362-1
	US-PATENT-CLASS-204-224		US-PATENT-APPL-SN-106118
	US-PATENT-3,352,774	c35 N80-16313	NASA-CASE-NPO-14839-1
c37 N80-14397	NASA-CASE-MFS-23284-1		US-PATENT-APPL-SN-106119
	US-PATENT-APPL-SN-753103	c36 N80-16321	NASA-CASE-LAR-12176-1
	US-PATENT-CLASS-204-1806		US-PATENT-APPL-SN-929083
	US-PATENT-CLASS-204-299R		US-PATENT-CLASS-332-751
	US-PATENT-4,040,940		US-PATENT-CLASS-350-355
c37 N80-14398	NASA-CASE-GSC-12222-1		US-PATENT-CLASS-356-28
	US-PATENT-APPL-SN-967436		US-PATENT-CLASS-356-243
	US-PATENT-CLASS-244-161		US-PATENT-4,176,950
	US-PATENT-CLASS-269-156	c37 N80-16339	NASA-CASE-LAR-12315-1
	US-PATENT-CLASS-294-86R		US-PATENT-APPL-SN-096257
	US-PATENT-CLASS-294-113	c44 N80-16452	NASA-CASE-MFS-23518-3
	US-PATENT-CLASS-414-1		US-PATENT-APPL-SN-829390
	US-PATENT-4,173,324		US-PATENT-APPL-SN-910793
c37 N80-14400	NASA-CASE-MSC-18422-1		US-PATENT-CLASS-126-417
	US-PATENT-APPL-SN-102593		US-PATENT-CLASS-126-901
c43 N80-14423	NASA-CASE-MFS-23720-2		US-PATENT-CLASS-428-629
	US-PATENT-APPL-SN-848421		US-PATENT-CLASS-428-656
	US-PATENT-CLASS-73-12		US-PATENT-CLASS-428-658
	US-PATENT-CLASS-73-82		US-PATENT-CLASS-428-675
	US-PATENT-4,157,655		US-PATENT-CLASS-428-680
c44 N80-14472	NASA-CASE-LEW-12586-1		US-PATENT-4,104,134
	US-PATENT-APPL-SN-916655		US-PATENT-4,177,325
	US-PATENT-CLASS-307-63	c51 N80-16714	NASA-CASE-MSC-16260-1
	US-PATENT-CLASS-307-66		US-PATENT-APPL-SN-876440
	US-PATENT-CLASS-323-15		US-PATENT-CLASS-23-927
	US-PATENT-CLASS-323-19		US-PATENT-CLASS-422-52
	US-PATENT-4,175,249		US-PATENT-CLASS-435-34
c44 N80-14473	NASA-CASE-MFS-23727-1		US-PATENT-4,176,007
	US-PATENT-APPL-SN-856465	c51 N80-16715	NASA-CASE-MFS-23883-1
	US-PATENT-CLASS-126-438		US-PATENT-APPL-SN-017888
	US-PATENT-CLASS-126-442		US-PATENT-CLASS-204-180R
	US-PATENT-CLASS-350-295		US-PATENT-CLASS-204-299R
	US-PATENT-CLASS-350-296		US-PATENT-CLASS-424-12
	US-PATENT-4,173,397		US-PATENT-4,181,589
c44 N80-14474	NASA-CASE-NPO-13652-3	c52 N80-16725	NASA-CASE-NPO-14092-1
	US-PATENT-APPL-SN-809890		US-PATENT-APPL-SN-807597
	US-PATENT-APPL-SN-891358		US-PATENT-CLASS-126-DIG.9
	US-PATENT-CLASS-29-572		US-PATENT-CLASS-128-6
	US-PATENT-CLASS-29-588		US-PATENT-CLASS-128-348
	US-PATENT-CLASS-29-627		US-PATENT-CLASS-138-33
	US-PATENT-CLASS-136-89P		US-PATENT-CLASS-138-103
	US-PATENT-4,133,697		US-PATENT-CLASS-138-133
	US-PATENT-4,173,820		US-PATENT-CLASS-219-201
c45 N80-14579	NASA-CASE-NPC-14340-1		US-PATENT-CLASS-219-522
	US-PATENT-APPL-SN-946992		US-PATENT-4,176,662
	US-PATENT-CLASS-210-57	c31 N80-17292	NASA-CASE-MSC-18430-1
	US-PATENT-CLASS-210-63Z		US-PATENT-APPL-SN-113015
	US-PATENT-CLASS-422-9	c33 N80-17359	NASA-CASE-MFS-23828-1
	US-PATENT-4,172,786		US-PATENT-APPL-SN-111436
c46 N80-14603	NASA-CASE-NPO-14124-1	c35 N80-17421	NASA-CASE-MFS-23775-1
	US-PATENT-APPL-SN-863024		US-PATENT-APPL-SN-098569

c44 N80-17544	NASA-CASE-MFS-25287-1 US-PATENT-APPL-SN-058570	c36 N80-18381	US-PATENT-APPL-SN-102001 NASA-CASE-NPO-14782-1
c60 N80-17723	NASA-CASE-FRC-11025-1 US-PATENT-APPL-SN-115536	c37 N80-18393	US-PATENT-APPL-SN-119339 NASA-CASE-ABC-11157-1
c06 N80-18036	NASA-CASE-FRC-11009-1 US-PATENT-APPL-SN-910708 US-PATENT-CLASS-73-188 US-PATENT-CLASS-73-189 US-PATENT-CLASS-73-212 US-PATENT-CLASS-340-177VA US-PATENT-4,184,149		US-PATENT-APPL-SN-935827 US-PATENT-CLASS-220-423 US-PATENT-CLASS-220-445 US-PATENT-CLASS-220-901 US-PATENT-4,184,609
c07 N80-18039	NASA-CASE-LEW-12971-1 US-PATENT-APPL-SN-858936 US-PATENT-CLASS-60-39.03 US-PATENT-CLASS-60-39.27 US-PATENT-CLASS-60-240 US-PATENT-4,184,327	c37 N80-18399	NASA-CASE-LAB-12372-1 US-PATENT-APPL-SN-108107
c20 N80-18097	NASA-CASE-MSC-18179-1 US-PATENT-APPL-SN-931218 US-PATENT-CLASS-6C-632 US-PATENT-4,183,217	c37 N80-18400	NASA-CASE-NPO-12131-3 US-PATENT-APPL-SN-096255
c31 N80-18231	NASA-CASE-NPO-14382-1 US-PATENT-APPL-SN-891373 US-PATENT-CLASS-261-118 US-PATENT-CLASS-422-224 US-PATENT-CLASS-423-350 US-PATENT-4,188,368	c37 N80-18402	NASA-CASE-LAB-11695-2 US-PATENT-APPL-SN-103836
c32 N80-18252	NASA-CASE-NPO-14152-1 US-PATENT-APPL-SN-899828 US-PATENT-CLASS-176-58R US-PATENT-CLASS-179-15BA US-PATENT-4,187,394	c43 N80-18498	NASA-CASE-LAB-12344-1 US-PATENT-APPL-SN-945041 US-PATENT-CLASS-343-5CM US-PATENT-CLASS-343-5W US-PATENT-CLASS-343-18E US-PATENT-CLASS-343-18D US-PATENT-4,184,155
c32 N80-18253	NASA-CASE-NPO-14328-1 NASA-CASE-NPO-14579-1 NASA-CASE-NPO-14590-1 US-PATENT-APPL-SN-956160 US-PATENT-CLASS-325-305 US-PATENT-CLASS-325-307 US-PATENT-CLASS-325-419 US-PATENT-4,186,347	c44 N80-18550	NASA-CASE-NPO-14303-1 NASA-CASE-NPO-14305-1 US-PATENT-APPL-SN-928133 US-PATENT-CLASS-156-104 US-PATENT-CLASS-156-278 US-PATENT-CLASS-156-285 US-PATENT-CLASS-156-303 US-PATENT-CLASS-156-312 US-PATENT-4,184,903
c33 N80-18285	NASA-CASE-NPO-14229-1 US-PATENT-APPL-SN-835419 US-PATENT-APPL-SN-949886 US-PATENT-CLASS-200-153S US-PATENT-CLASS-200-304 US-PATENT-CLASS-333-262 US-PATENT-4,187,416	c44 N80-18551	NASA-CASE-NPO-14096-1 US-PATENT-APPL-SN-928128 US-PATENT-CLASS-324-158E US-PATENT-CLASS-324-404 US-PATENT-4,184,111
c33 N80-18286	NASA-CASE-GSC-12347-1 US-PATENT-APPL-SN-868249 US-PATENT-CLASS-174-73R US-PATENT-CLASS-174-142 US-PATENT-4,185,164	c44 N80-18552	NASA-CASE-LAB-11999-1 US-PATENT-APPL-SN-876295 US-PATENT-CLASS-250-211K US-PATENT-CLASS-250-231SE US-PATENT-4,184,072
c33 N80-18287	NASA-CASE-NPO-14224-1 US-PATENT-APPL-SN-951829 US-PATENT-CLASS-310-306 US-PATENT-CLASS-343-100R US-PATENT-CLASS-343-100ST US-PATENT-4,187,506	c44 N80-18555	NASA-CASE-LEW-12363-4 US-PATENT-APPL-SN-079914
c34 N80-18338	NASA-CASE-GSC-12415-1 US-PATENT-APPL-SN-043943	c48 N80-18667	NASA-CASE-MFS-23862-1 US-PATENT-APPL-SN-951423 US-PATENT-CLASS-73-170A US-PATENT-4,184,368
c35 N80-18357	NASA-CASE-NPC-14501-1 US-PATENT-APPL-SN-918535 US-PATENT-CLASS-73-56 US-PATENT-CLASS-73-343R US-PATENT-CLASS-264-40.4 US-PATENT-4,185,493	c52 N80-18690	NASA-CASE-LEW-12723-1 US-PATENT-APPL-SN-829317 US-PATENT-CLASS-128-276 US-PATENT-CLASS-128-760 US-PATENT-4,184,491
c35 N80-18358	NASA-CASE-LAB-12269-1 US-PATENT-APPL-SN-934576 US-PATENT-CLASS-73-4R US-PATENT-CLASS-73-40 US-PATENT-4,182,158	c52 N80-18691	NASA-CASE-ABC-11120-1 US-PATENT-APPL-SN-796256 US-PATENT-CLASS-73-724 US-PATENT-CLASS-128-748 US-PATENT-CLASS-128-903 US-PATENT-4,186,749
c35 N80-18359	NASA-CASE-GSC-12219-1 US-PATENT-APPL-SN-891356 US-PATENT-CLASS-73-355R US-PATENT-CLASS-325-363 US-PATENT-CLASS-343-100ME US-PATENT-CLASS-356-216 US-PATENT-4,178,100	c76 N80-18951	NASA-CASE-GSC-12291-1 US-PATENT-APPL-SN-906298 US-PATENT-CLASS-51-235 US-PATENT-CLASS-83-152 US-PATENT-CLASS-83-670 US-PATENT-CLASS-125-23E US-PATENT-CLASS-269-21 US-PATENT-4,184,472
c35 N80-18363	NASA-CASE-LAB-12465-1 US-PATENT-APPL-SN-106136	c26 N80-19237	NASA-CASE-MSC-18172-1 US-PATENT-APPL-SN-119334
c35 N80-18364	NASA-CASE-NPO-13606-2 US-PATENT-APPL-SN-065676	c33 N80-19424	NASA-CASE-GSC-12518-1 US-PATENT-APPL-SN-119336
c36 N80-18372	NASA-CASE-NPO-14254-1 US-PATENT-APPL-SN-876432 US-PATENT-CLASS-330-4 US-PATENT-CLASS-331-94 US-PATENT-CLASS-333-24R US-PATENT-4,187,470	c33 N80-19425	NASA-CASE-LEW-12296-1 US-PATENT-APPL-SN-122966
c36 N80-18380	NASA-CASE-GSC-12321-1	c35 N80-19468	NASA-CASE-MSC-18526-1 US-PATENT-APPL-SN-119335
		c02 N80-20224	NASA-CASE-LAB-12261-1 US-PATENT-APPL-SN-964005 US-PATENT-CLASS-73-147 US-PATENT-CLASS-73-205L US-PATENT-4,188,823
		c04 N80-20249	NASA-CASE-FRC-11052-1 US-PATENT-APPL-SN-129783
		c25 N80-20334	NASA-CASE-NPO-14079-1 US-PATENT-APPL-SN-958573 US-PATENT-CLASS-250-307 US-PATENT-CLASS-250-308 US-PATENT-4,194,115
		c25 N80-20338	NASA-CASE-NPO-14369-1 US-PATENT-APPL-SN-126063
		c28 N80-20402	NASA-CASE-LEW-12081-2

	US-PATENT-APPL-SN-676432	c35 N80-21723	NASA-CASE-NPO-14940-1
	US-PATENT-APPL-SN-837794		US-PATENT-APPL-SN-135038
	US-PATENT-CLASS-149-1	c44 N80-21828	NASA-CASE-MFS-23515-1
	US-PATENT-CLASS-423-6488		US-PATENT-APPL-SN-880726
	US-PATENT-4,193,827		US-PATENT-CLASS-415-2
c32 N80-20448	NASA-CASE-NPO-14480-1		US-PATENT-CLASS-415-101
	US-PATENT-APPL-SN-910707		US-PATENT-4,191,505
	US-PATENT-CLASS-325-4	c44 N80-21831	NASA-CASE-MFS-23830-1
	US-PATENT-CLASS-325-8		US-PATENT-APPL-SN-129780
	US-PATENT-CLASS-325-9	c60 N80-21987	NASA-CASE-GSC-12447-1
	US-PATENT-CLASS-325-14		US-PATENT-APPL-SN-128230
	US-PATENT-4,189,675	c08 N80-22359	NASA-CASE-LAR-12468-1
c32 N80-20453	NASA-CASE-GSC-12430-1		US-PATENT-APPL-SN-135057
	US-PATENT-APPL-SN-129779	c24 N80-22410	NASA-CASE-ARC-11246-1
c33 N80-20487	NASA-CASE-LEW-13148-1		US-PATENT-APPL-SN-136660
	US-PATENT-APPL-SN-964754	c35 N80-22661	NASA-CASE-LAR-12633-1
	US-PATENT-CLASS-429-101		US-PATENT-APPL-SN-135039
	US-PATENT-CLASS-429-105	c37 N80-22703	NASA-CASE-MSC-18538-1
	US-PATENT-CLASS-429-107		US-PATENT-APPL-SN-138944
	US-PATENT-CLASS-429-109	c37 N80-22704	NASA-CASE-LAR-12482-1
	US-PATENT-4,192,910		US-PATENT-APPL-SN-100611
c33 N80-20488	NASA-CASE-FRC-11041-1	c25 N80-23383	NASA-CASE-ARC-11154-1
	US-PATENT-APPL-SN-126064		US-PATENT-APPL-SN-921626
c34 N80-20528	NASA-CASE-MFS-25139-1		US-PATENT-CLASS-55-66
	US-PATENT-APPL-SN-126138		US-PATENT-CLASS-55-67
c35 N80-20559	NASA-CASE-LAR-12304-1		US-PATENT-CLASS-55-68
	US-PATENT-APPL-SN-928130		US-PATENT-CLASS-55-72
	US-PATENT-CLASS-29-25.35		US-PATENT-CLASS-521-55
	US-PATENT-CLASS-310-311		US-PATENT-CLASS-521-146
	US-PATENT-CLASS-310-327		US-PATENT-CLASS-521-918
	US-PATENT-CLASS-310-334		US-PATENT-CLASS-525-4
	US-PATENT-CLASS-310-360		US-PATENT-4,198,792
	US-PATENT-4,195,244	c25 N80-23394	NASA-CASE-NPO-15015-1
c35 N80-20560	NASA-CASE-FRC-10093-1		US-PATENT-APPL-SN-145207
	US-PATENT-APPL-SN-678539	c26 N80-23419	NASA-CASE-MFS-23816-1
	US-PATENT-CLASS-219-85CA		US-PATENT-APPL-SN-974292
	US-PATENT-CLASS-219-85CH		US-PATENT-CLASS-75-135
	US-PATENT-CLASS-219-85E		US-PATENT-CLASS-75-136
	US-PATENT-CLASS-338-2		US-PATENT-CLASS-75-178E
	US-PATENT-4,195,279		US-PATENT-CLASS-148-32
c35 N80-20563	NASA-CASE-NPO-14093-1		US-PATENT-4,198,232
	US-PATENT-APPL-SN-880729	c27 N80-23452	NASA-CASE-ARC-10980-1
	US-PATENT-CLASS-356-346		US-PATENT-APPL-SN-694407
	US-PATENT-4,193,693		US-PATENT-CLASS-204-171
c35 N80-20565	NASA-CASE-GSC-12354-1		US-PATENT-CLASS-210-23H
	US-PATENT-APPL-SN-128229		US-PATENT-CLASS-210-500H
c36 N80-20574	NASA-CASE-NPO-15021-1		US-PATENT-CLASS-427-41
	US-PATENT-APPL-SN-130496		US-PATENT-CLASS-427-245
c37 N80-20589	NASA-CASE-FRC-11042-1		US-PATENT-4,199,448
	US-PATENT-APPL-SN-129778	c27 N80-23454	NASA-CASE-ARC-11310-1
c44 N80-20808	NASA-CASE-NFO-14237-1		US-PATENT-APPL-SN-147700
	US-PATENT-APPL-SN-897831	c28 N80-23471	NASA-CASE-NPO-14109-1
	US-PATENT-CLASS-126-263		US-PATENT-APPL-SN-946990
	US-PATENT-CLASS-149-15		US-PATENT-CLASS-23-300
	US-PATENT-CLASS-149-37		US-PATENT-CLASS-23-302A
	US-PATENT-CLASS-220-429		US-PATENT-CLASS-23-302B
	US-PATENT-4,193,388		US-PATENT-CLASS-23-302T
c44 N80-20810	NASA-CASE-LAR-12205-1		US-PATENT-CLASS-149-108.4
	US-PATENT-APPL-SN-900843		US-PATENT-4,198,209
	US-PATENT-CLASS-126-419	c32 N80-23524	NASA-CASE-NPO-14519-1
	US-PATENT-CLASS-126-434		US-PATENT-APPL-SN-008207
	US-PATENT-CLASS-126-437		US-PATENT-CLASS-343-786
	US-PATENT-CLASS-165-32		US-PATENT-CLASS-343-895
	US-PATENT-4,192,290		US-PATENT-4,199,764
c74 N80-21138	NASA-CASE-LAR-12178-1	c33 N80-23559	NASA-CASE-NPO-13804-1
	US-PATENT-APPL-SN-953390		US-PATENT-APPL-SN-766995
	US-PATENT-CLASS-350-25		US-PATENT-CLASS-310-319
	US-PATENT-CLASS-350-285		US-PATENT-CLASS-331-65
	US-PATENT-CLASS-356-150		US-PATENT-CLASS-340-602
	US-PATENT-CLASS-356-152		US-PATENT-CLASS-340-604
	US-PATENT-4,189,234		US-PATENT-4,197,530
c74 N80-21140	NASA-CASE-GSC-12357-1	c37 N80-23653	NASA-CASE-MSC-16938-1
	US-PATENT-APPL-SN-943089		US-PATENT-APPL-SN-938582
	US-PATENT-CLASS-250-277CH		US-PATENT-CLASS-151-41.76
	US-PATENT-CLASS-256-280		US-PATENT-4,193,435
	US-PATENT-CLASS-350-162B	c37 N80-23654	NASA-CASE-NPO-14473-1
	US-PATENT-CLASS-356-334		US-PATENT-APPL-SN-938300
	US-PATENT-4,192,994		US-PATENT-CLASS-137-375
c27 N80-21533	NASA-CASE-ARC-11176-1		US-PATENT-CLASS-137-625.4
	US-PATENT-APPL-SN-129799		US-PATENT-CLASS-251-86
c33 N80-21670	NASA-CASE-GSC-12420-1		US-PATENT-CLASS-251-138
	US-PATENT-APPL-SN-129793		US-PATENT-4,195,666
c33 N80-21671	NASA-CASE-GSC-12553-1	c37 N80-23655	NASA-CASE-GSC-12318-1
	US-PATENT-APPL-SN-106192		US-PATENT-APPL-SN-894213
c35 N80-21719	NASA-CASE-GSC-12273-1		US-PATENT-CLASS-219-160
	US-PATENT-APPL-SN-897830		US-PATENT-CLASS-219-161
	US-PATENT-CLASS-244-165		US-PATENT-CLASS-228-44.1B
	US-PATENT-CLASS-244-170		US-PATENT-CLASS-228-212
	US-PATENT-4,193,570		US-PATENT-CLASS-228-222

	US-PATENT-CLASS-269-287		US-PATENT-APPL-SN-831632
	US-PATENT-4,196,840		US-PATENT-CLASS-60-39.06
c43 N80-23711	NASA-CASE-MFS-23720-1		US-PATENT-CLASS-60-733
	US-PATENT-APPL-SN-848419		US-PATENT-CLASS-60-746
	US-PATENT-CLASS-73-12		US-PATENT-4,204,402
	US-PATENT-CLASS-73-82	c23 N80-26386	NASA-CASE-ARC-11267-1
	US-PATENT-4,195,512		US-PATENT-APPL-SN-163839
c52 N80-23969	NASA-CASE-FRC-11012-1	c24 N80-26388	NASA-CASE-MFS-23626-1
	US-PATENT-APPL-SN-928137		US-PATENT-APPL-SN-941711
	US-PATENT-CLASS-128-666		US-PATENT-CLASS-156-212
	US-PATENT-CLASS-128-690		US-PATENT-CLASS-156-213
	US-PATENT-4,198,988		US-PATENT-CLASS-156-285
c74 N80-24149	NASA-CASE-GSC-12348-1		US-PATENT-CLASS-260-17.2
	US-PATENT-APPL-SN-929088		US-PATENT-CLASS-264-118
	US-PATENT-CLASS-51-277		US-PATENT-CLASS-264-115
	US-PATENT-CLASS-51-283B		US-PATENT-CLASS-264-124
	US-PATENT-CLASS-65-61		US-PATENT-4,204,899
	US-PATENT-4,198,788	c24 N80-26389	NASA-CASE-LEW-13343-1
c74 N80-24152	NASA-CASE-NFO-14813-1		US-PATENT-APPL-SN-161254
	US-PATENT-APPL-SN-145282	c25 N80-26407	NASA-CASE-ARC-11267-2
c09 N80-24334	NASA-CASE-LAB-12441-1		US-PATENT-APPL-SN-163838
	US-PATENT-APPL-SN-145210	c27 N80-26446	NASA-CASE-MSC-16074-1
c27 N80-24437	NASA-CASE-LEW-13027-1		US-PATENT-APPL-SN-747674
	US-PATENT-APPL-SN-958575		US-PATENT-CLASS-8-DIG.12
	US-PATENT-CLASS-427-38		US-PATENT-CLASS-8-DIG.18
	US-PATENT-CLASS-427-40		US-PATENT-CLASS-8-115.5
	US-PATENT-CLASS-427-164		US-PATENT-CLASS-204-159.15
	US-PATENT-CLASS-428-421		US-PATENT-CLASS-204-159.19
	US-PATENT-CLASS-428-474		US-PATENT-CLASS-525-426
	US-PATENT-4,199,650		US-PATENT-4,203,723
c27 N80-24438	NASA-CASE-MSC-14903-3	c27 N80-26447	NASA-CASE-LEW-12876-1
	US-PATENT-APPL-SN-706424		US-PATENT-APPL-SN-161253
	US-PATENT-APPL-SN-907479	c32 N80-26571	NASA-CASE-LAB-12697-1
	US-PATENT-CLASS-260-DIG.29		US-PATENT-APPL-SN-158183
	US-PATENT-CLASS-525-326	c33 N80-26599	NASA-CASE-FRC-10113-1
	US-PATENT-CLASS-525-336		US-PATENT-APPL-SN-885066
	US-PATENT-CLASS-525-340		US-PATENT-CLASS-324-51
	US-PATENT-CLASS-525-374		US-PATENT-4,204,154
	US-PATENT-CLASS-525-375	c33 N80-26601	NASA-CASE-GSC-12555-1
	US-PATENT-CLASS-526-261		US-PATENT-APPL-SN-153240
	US-PATENT-CLASS-526-275	c35 N80-26635	NASA-CASE-NPC-14372-1
	US-PATENT-CLASS-526-276		US-PATENT-APPL-SN-646333
	US-PATENT-CLASS-526-278		US-PATENT-APPL-SN-956529
	US-PATENT-CLASS-528-481		US-PATENT-CLASS-250-338
	US-PATENT-4,200,721		US-PATENT-CLASS-250-352
c27 N80-24440	NASA-CASE-MSC-18382-1		US-PATENT-CLASS-250-353
	US-PATENT-APPL-SN-145107		US-PATENT-CLASS-356-328
c32 N80-24510	NASA-CASE-NPO-14524-1		US-PATENT-4,205,229
	NASA-CASE-NPO-14527-1	c37 N80-26658	NASA-CASE-LEW-12131-2
	US-PATENT-APPL-SN-957452		US-PATENT-APPL-SN-861290
	US-PATENT-CLASS-350-6.5		US-PATENT-APPL-SN-931090
	US-PATENT-CLASS-350-6.6		US-PATENT-CLASS-415-174
	US-PATENT-CLASS-350-294		US-PATENT-CLASS-415-196
	US-PATENT-CLASS-356-28.5		US-PATENT-4,135,851
	US-PATENT-4,201,468		US-PATENT-4,207,024
c33 N80-24549	NASA-CASE-LAB-12705-1	c37 N80-26659	NASA-CASE-LEW-12995-1
	US-PATENT-APPL-SN-135058		US-PATENT-APPL-SN-157150
c34 N80-24573	NASA-CASE-LEW-12441-2	c37 N80-26660	NASA-CASE-NPO-15037-1
	US-PATENT-APPL-SN-559846		US-PATENT-APPL-SN-161257
	US-PATENT-APPL-SN-856462	c47 N80-26992	NASA-CASE-NPO-14936-1
	US-PATENT-CLASS-60-267		US-PATENT-APPL-SN-163837
	US-PATENT-CLASS-239-127.1	c51 N80-27067	NASA-CASE-MSC-16777-1
	US-PATENT-4,199,937		US-PATENT-APPL-SN-893657
c36 N80-24602	NASA-CASE-NPO-15111-1		US-PATENT-CLASS-23-230B
	US-PATENT-APPL-SN-150040		US-PATENT-CLASS-204-195B
c37 N80-24619	NASA-CASE-LEW-13268-1		US-PATENT-CLASS-422-68
	US-PATENT-APPL-SN-145209		US-PATENT-CLASS-435-3
c44 N80-24741	NASA-CASE-NPO-14635-1		US-PATENT-CLASS-435-32
	US-PATENT-APPL-SN-008212		US-PATENT-CLASS-435-34
	US-PATENT-CLASS-136-89SG		US-PATENT-CLASS-435-36
	US-PATENT-CLASS-156-DIG.64		US-PATENT-CLASS-435-39
	US-PATENT-CLASS-156-605		US-PATENT-CLASS-435-289
	US-PATENT-CLASS-156-617SP		US-PATENT-CLASS-435-290
	US-PATENT-CLASS-252-62.3E		US-PATENT-CLASS-435-291
	US-PATENT-4,210,622		US-PATENT-CLASS-435-311
c44 N80-24747	NASA-CASE-NPC-15071-1		US-PATENT-CLASS-435-316
	US-PATENT-APPL-SN-150115		US-PATENT-4,204,037
c46 N80-24906	NASA-CASE-NPO-14558-1	c52 N80-27072	NASA-CASE-NPO-14212-1
	US-PATENT-APPL-SN-945436		US-PATENT-APPL-SN-83830E
	US-PATENT-CLASS-73-155		US-PATENT-CLASS-33-125E
	US-PATENT-4,196,619		US-PATENT-CLASS-73-781
c74 N80-25134	NASA-CASE-MFS-23776-1		US-PATENT-CLASS-128-642
	US-PATENT-APPL-SN-145272		US-PATENT-CLASS-128-774
c37 N80-25660	NASA-CASE-NPO-15115-1		US-PATENT-CLASS-128-782
	US-PATENT-APPL-SN-154725		US-PATENT-CLASS-338-2
c39 N80-25693	NASA-CASE-LAB-12393-1		US-PATENT-4,204,544
	US-PATENT-APPL-SN-145208	c52 N80-27073	NASA-CASE-GSC-12560-1
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	US-PATENT-APPL-SN-684045	c72 N80-27163	NASA-CASE-NPO-14324-1

	US-PATENT-APPL-SN-940970		US-PATENT-CLASS-357-91
	US-PATENT-CLASS-250-427		US-PATENT-4,090,213
	US-PATENT-CLASS-313-156	c44 N80-29843	NASA-CASE-NPO-15183
	US-PATENT-CLASS-313-362		US-PATENT-APPL-SN-173519
	US-PATENT-CLASS-313-363	c54 N80-30043	NASA-CASE-ARC-11314-1
	US-PATENT-4,206,383		US-PATENT-APPL-SN-168943
c74 N80-27185	NASA-CASE-LAR-12251-1	c60 N80-30050	NASA-CASE-MSC-18498-1
	US-PATENT-APPL-SN-953389		US-PATENT-APPL-SN-173518
	US-PATENT-CLASS-350-175E	c23 N80-31472	NASA-CASE-ARC-11243-2
	US-PATENT-CLASS-350-226		US-PATENT-APPL-SN-183707
	US-PATENT-4,206,970	c25 N80-31490	NASA-CASE-ARC-113261-1
c02 N80-28300	NASA-CASE-FRC-11024-1		US-PATENT-APPL-SN-178192
	US-PATENT-APPL-SN-015983	c33 N80-31731	NASA-CASE-LAR-12659-1
	US-PATENT-CLASS-73-180		US-PATENT-APPL-SN-171926
	US-PATENT-CLASS-73-182	c35 N80-31774	NASA-CASE-LAR-12474-1
	US-PATENT-CLASS-73-861.65		US-PATENT-APPL-SN-171934
	US-PATENT-CLASS-73-861.66	c37 N80-31790	NASA-CASE-LEW-12274-1
	US-PATENT-4,212,199		US-PATENT-APPL-SN-950876
c26 N80-28492	NASA-CASE-LAR-11821-1		US-PATENT-CLASS-60-520
	US-PATENT-APPL-SN-023501		US-PATENT-CLASS-417-383
	US-PATENT-CLASS-148-131	c76 N80-32244	US-PATENT-4,215,548
	US-PATENT-CLASS-266-119		NASA-CASE-NPO-14298-1
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	US-PATENT-4,212,690		US-PATENT-CLASS-422-246
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	US-PATENT-APPL-SN-951830	c76 N80-32245	NASA-CASE-NPO-14295-1
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	US-PATENT-CLASS-149-20		US-PATENT-CLASS-156-DIG.88
	US-PATENT-4,210,474		US-PATENT-CLASS-156-601
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	US-PATENT-APPL-SN-161256		US-PATENT-4,215,345
c35 N80-28686	NASA-CASE-LAR-11370-1	c07 N80-32392	NASA-CASE-ARC-10977-1
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	US-PATENT-CLASS-250-457		US-PATENT-CLASS-60-264
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	US-PATENT-CLASS-250-513		US-PATENT-CLASS-239-265.33
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	US-PATENT-CLASS-356-369		US-PATENT-APPL-SN-007083
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	US-PATENT-APPL-SN-672219		US-PATENT-4,214,902
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c32 N80-29539	NASA-CASE-LAR-11745-1	c27 N80-32515	NASA-CASE-NPO-13899-1
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	US-PATENT-APPL-SN-951828		US-PATENT-CLASS-427-44
	US-PATENT-CLASS-83-820		US-PATENT-CLASS-428-500
	US-PATENT-CLASS-125-21		US-PATENT-CLASS-429-139
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	US-PATENT-APPL-SN-168944		US-PATENT-APPL-SN-009886
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	US-PATENT-APPL-SN-173520		US-PATENT-CLASS-236-13
c44 N80-29834	NASA-CASE-LAR-11551-1		US-PATENT-CLASS-236-44C
	US-PATENT-APPL-SN-883090		US-PATENT-CLASS-236-49
	US-PATENT-CLASS-290-53		US-PATENT-4,210,278
	US-PATENT-CLASS-310-30	c31 N80-32584	NASA-CASE-NPO-14191-1
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	US-PATENT-APPL-SN-696374		US-PATENT-CLASS-367-27
	US-PATENT-CLASS-148-1.5		US-PATENT-CLASS-367-36
	US-PATENT-CLASS-357-30		US-PATENT-CLASS-367-57
	US-PATENT-CLASS-357-52		US-PATENT-4,214,226

c31 N80-32585	NASA-CASE-MFS-25363-1 US-PATENT-APPL-SN-171933	c35 N81-12388	NASA-CASE-LAR-12469-1 US-PATENT-APPL-SN-195223
c32 N80-32604	NASA-CASE-MSC-18334-1 US-PATENT-APPL-SN-051270 US-PATENT-CLASS-343-700MS US-PATENT-CLASS-343-830 US-PATENT-4,218,682	c35 N81-12389	NASA-CASE-LAR-12363-1 US-PATENT-APPL-SN-191748
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c32 N80-32607	NASA-CASE-NFO-14525-2 US-PATENT-APPL-SN-165910	c36 N81-12407	NASA-CASE-GSC-12592-1 US-PATENT-APPL-SN-199766
c33 N80-32650	NASA-CASE-NFO-14424-1 NASA-CASE-NFO-14430-1 US-PATENT-APPL-SN-918534 US-PATENT-CLASS-324-62 US-PATENT-CLASS-324-64 US-PATENT-4,218,650	c37 N81-12422	NASA-CASE-LAR-12361-1 US-PATENT-APPL-SN-182880
c33 N80-32651	NASA-CASE-MFS-25211-1 US-PATENT-APPL-SN-168995	c44 N81-12542	NASA-CASE-LBW-12806-2 US-PATENT-APPL-SN-065676 US-PATENT-APPL-SN-915050 US-PATENT-CLASS-136-249 US-PATENT-CLASS-136-291 US-PATENT-CLASS-363-27 US-PATENT-CLASS-363-60 US-PATENT-CLASS-363-147 US-PATENT-4,217,633
c37 N80-32716	NASA-CASE-MFS-23777-1 US-PATENT-APPL-SN-931217 US-PATENT-CLASS-74-425 US-PATENT-CLASS-74-661 US-PATENT-CLASS-74-665C US-PATENT-CLASS-318-15 US-PATENT-4,215,592	c52 N81-12724	NASA-CASE-LAR-12471-1 US-PATENT-APPL-SN-178193
c37 N80-32717	NASA-CASE-GSC-12289-1 US-PATENT-APPL-SN-943086 US-PATENT-CLASS-198-847 US-PATENT-CLASS-198-848 US-PATENT-CLASS-474-205 US-PATENT-4,215,590	c74 N81-12862	NASA-CASE-KSC-11104-1 US-PATENT-APPL-SN-153245
c44 N80-32850	NASA-CASE-NFO-15179-1 US-PATENT-APPL-SN-185867	c24 N81-13999	NASA-CASE-ARC-11174-1 US-PATENT-APPL-SN-929086 US-PATENT-CLASS-260-17.2 US-PATENT-CLASS-428-114 US-PATENT-CLASS-428-528 US-PATENT-CLASS-428-541 US-PATENT-CLASS-428-921 US-PATENT-4,209,561
c52 N80-33081	NASA-CASE-ARC-11258-1 US-PATENT-APPL-SN-185865	c24 N81-14000	NASA-CASE-LAR-12065-1 US-PATENT-APPL-SN-889671 US-PATENT-CLASS-156-330 US-PATENT-CLASS-428-113 US-PATENT-CLASS-428-114 US-PATENT-CLASS-428-140 US-PATENT-CLASS-428-413 US-PATENT-CLASS-428-480 US-PATENT-CLASS-428-902 US-PATENT-4,229,473
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c74 N80-33210	NASA-CASE-MSC-18255-1 US-PATENT-APPL-SN-025163 US-PATENT-CLASS-250-347 US-PATENT-CLASS-250-352 US-PATENT-CLASS-250-353 US-PATENT-CLASS-350-55 US-PATENT-CLASS-356-72 US-PATENT-4,215,273	c25 N81-14016	NASA-CASE-ARC-11241-1 US-PATENT-APPL-SN-037066 US-PATENT-CLASS-260-33.8F US-PATENT-CLASS-528-362 US-PATENT-CLASS-528-401 US-PATENT-CLASS-528-422 US-PATENT-4,234,715
c85 N80-33312	NASA-CASE-FRC-11058-1 US-PATENT-APPL-SN-175453	c27 N81-14076	NASA-CASE-NFO-14001-1 US-PATENT-APPL-SN-771245 US-PATENT-CLASS-210-248 US-PATENT-CLASS-260-2.1E US-PATENT-CLASS-260-17A US-PATENT-CLASS-260-858 US-PATENT-CLASS-260-886 US-PATENT-CLASS-260-895 US-PATENT-CLASS-260-896 US-PATENT-CLASS-260-901 US-PATENT-CLASS-260-8900 US-PATENT-CLASS-521-27 US-PATENT-CLASS-521-32 US-PATENT-CLASS-521-62 US-PATENT-4,119,581
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c74 N80-34250	NASA-CASE-NFO-15036-1 US-PATENT-APPL-SN-188160		
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c18 N81-12156	NASA-CASE-GSC-12551-1 US-PATENT-APPL-SN-182881		
c24 N81-12174	NASA-CASE-LAR-12742-1 US-PATENT-APPL-SN-189234		
c26 N81-12211	NASA-CASE-LBW-13339-1 US-PATENT-APPL-SN-199769		
c31 N81-12283	NASA-CASE-MFS-25134-1 US-PATENT-APPL-SN-195226		
c33 N81-12330	NASA-CASE-MFS-25535-1 US-PATENT-APPL-SN-199765		
c33 N81-12331	NASA-CASE-GSC-12595-1 US-PATENT-APPL-SN-206506		
c34 N81-12362	NASA-CASE-LAR-12637-1 US-PATENT-APPL-SN-183706		
c34 N81-12363	NASA-CASE-LBW-13174-1 US-PATENT-APPL-SN-200634		
c35 N81-12386	NASA-CASE-GSC-12614-1 US-PATENT-APPL-SN-195227		
c35 N81-12387	NASA-CASE-GSC-12608-1 US-PATENT-APPL-SN-195228		

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	US-PATENT-APPL-SN-009887	c51 N81-14605	NASA-CASE-ARC-11114-1
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	US-PATENT-APPL-SN-837794		US-PATENT-CLASS-128-DIG.6
	US-PATENT-CLASS-44-7R		US-PATENT-CLASS-128-DIG.9
	US-PATENT-CLASS-55-2		US-PATENT-CLASS-128-DIG.12
	US-PATENT-CLASS-62-12		US-PATENT-CLASS-128-DIG.16
	US-PATENT-CLASS-62-18		US-PATENT-CLASS-128-DIG.26
	US-PATENT-CLASS-62-40		US-PATENT-CLASS-128-204.18
	US-PATENT-CLASS-62-47		US-PATENT-CLASS-128-207.14
	US-PATENT-CLASS-149-1		US-PATENT-CLASS-128-207.28
	US-PATENT-CLASS-156-344		US-PATENT-CLASS-128-236
	US-PATENT-CLASS-423-648R		US-PATENT-4,212,297
	US-PATENT-4,077,788	c52 N81-14612	NASA-CASE-ARC-11117-1
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	US-PATENT-CLASS-455-71		US-PATENT-CLASS-102-92.1
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c33 N81-14220	NASA-CASE-NPO-14163-1	c27 N81-15104	NASA-CASE-NPO-10030-1
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	US-PATENT-CLASS-363-56		US-PATENT-CLASS-33.80R
	US-PATENT-CLASS-363-71		US-PATENT-CLASS-37R
	US-PATENT-CLASS-363-78		US-PATENT-CLASS-41R
	US-PATENT-4,222,098		US-PATENT-CLASS-77.5A
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	US-PATENT-APPL-SN-965367		US-PATENT-CLASS-94.9R
	US-PATENT-CLASS-340-309.4		US-PATENT-CLASS-117-6
	US-PATENT-CLASS-340-310A		US-PATENT-CLASS-138.8R
	US-PATENT-CLASS-340-310R		US-PATENT-CLASS-260-33.60R
	US-PATENT-CLASS-340-870.24		US-PATENT-CLASS-859R
	US-PATENT-CLASS-368-47		US-PATENT-3,655,814
	US-PATENT-CLASS-370-85	c27 N81-15107	NASA-CASE-LAR-12723-1
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c35 N81-14287	NASA-CASE-NPO-14513-1	c28 N81-15119	NASA-CASE-NPO-14110-1
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	US-PATENT-CLASS-62-514R		US-PATENT-CLASS-23-293R
	US-PATENT-CLASS-165-105		US-PATENT-CLASS-75-25
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	US-PATENT-APPL-SN-969756		US-PATENT-CLASS-260-96D
	US-PATENT-CLASS-52-232		US-PATENT-CLASS-423-1
	US-PATENT-CLASS-52-743		US-PATENT-CLASS-423-131
	US-PATENT-CLASS-150-11		US-PATENT-CLASS-423-658.5
	US-PATENT-CLASS-156-294		US-PATENT-CLASS-525-384
	US-PATENT-4,235,060		US-PATENT-CLASS-526-914
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	US-PATENT-APPL-SN-907421	c31 N81-15154	NASA-CASE-NPO-13758-2
	US-PATENT-CLASS-6C-518		US-PATENT-APPL-SN-623389
	US-PATENT-CLASS-74-417		US-PATENT-APPL-SN-727444
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	US-PATENT-APPL-SN-953314		US-PATENT-CLASS-110-232
	US-PATENT-CLASS-82-1.2		US-PATENT-CLASS-110-343
	US-PATENT-CLASS-82-1C		US-PATENT-CLASS-110-347
	US-PATENT-CLASS-82-36R		US-PATENT-CLASS-202-116
	US-PATENT-CLASS-407-85		US-PATENT-CLASS-264-23
	US-PATENT-CLASS-407-117		US-PATENT-CLASS-425-378R
	US-PATENT-CLASS-408-1R		US-PATENT-4,206,713
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	US-PATENT-CLASS-244-161		US-PATENT-CLASS-375-58
	US-PATENT-CLASS-294-106		US-PATENT-CLASS-375-115
	US-PATENT-CLASS-414-1		US-PATENT-4,221,005
	US-PATENT-4,219,171	c33 N81-15192	NASA-CASE-NPO-14444-1
c44 N81-14389	NASA-CASE-NPO-14416-1		US-PATENT-APPL-SN-017890
	US-PATENT-APPL-SN-014664		US-PATENT-CLASS-332-22

	US-PATENT-CLASS-332-238		US-PATENT-CLASS-73-178E
	US-PATENT-CLASS-375-54		US-PATENT-4,240,290
	US-PATENT-CLASS-375-67	c24 N81-17170	NASA-CASE-LEW-12493-1
	US-PATENT-CLASS-455-102		US-PATENT-APPL-SN-893857
	US-PATENT-4,216,542		US-PATENT-CLASS-156-292
c33 N81-15194	NASA-CASE-NPC-14998-1		US-PATENT-CLASS-228-118
	US-PATENT-APPL-SN-195547		US-PATENT-CLASS-228-170
c33 N81-15195	NASA-CASE-LAR-12772-1		US-PATENT-CLASS-228-174
	US-PATENT-APPL-SN-159767		US-PATENT-CLASS-228-190
c36 N81-15350	NASA-CASE-NFO-14584-1		US-PATENT-4,211,354
	US-PATENT-APPL-SN-210490	c25 N81-17187	NASA-CASE-NFO-13530-1
c37 N81-15363	NASA-CASE-MSC-18134-1		US-PATENT-CLASS-210-500M
	US-PATENT-APPL-SN-974472		US-PATENT-CLASS-260-2.1
	US-PATENT-CLASS-277-181		US-PATENT-CLASS-260-2.2B
	US-PATENT-CLASS-277-229		US-PATENT-4,014,798
	US-PATENT-4,219,203	c27 N81-17259	NASA-CASE-ARC-11248-1
c37 N81-15364	NASA-CASE-NPO-14170-1		US-PATENT-APPL-SN-028300
	US-PATENT-APPL-SN-860404		US-PATENT-CLASS-528-362
	US-PATENT-CLASS-188-134		US-PATENT-CLASS-528-401
	US-PATENT-CLASS-188-180		US-PATENT-CLASS-528-422
	US-PATENT-CLASS-188-184		US-PATENT-CLASS-528-423
	US-PATENT-CLASS-244-173		US-PATENT-4,242,498
	US-PATENT-4,219,107	c27 N81-17260	NASA-CASE-LEW-13226-1
c54 N81-15699	NASA-CASE-MSC-18529-1		US-PATENT-APPL-SN-070771
	US-PATENT-APPL-SN-158093		US-PATENT-CLASS-260-37EP
c60 N81-15706	NASA-CASE-NPO-14162-1		US-PATENT-CLASS-260-326N
	NASA-CASE-NPO-14167-1		US-PATENT-CLASS-260-326S
	NASA-CASE-NPO-14169-1		US-PATENT-CLASS-528-118
	US-PATENT-APPL-SN-893903		US-PATENT-CLASS-528-322
	US-PATENT-CLASS-307-219		US-PATENT-CLASS-538-117
	US-PATENT-CLASS-307-225R		US-PATENT-4,244,857
	US-PATENT-CLASS-307-269	c27 N81-17261	NASA-CASE-NPO-14315-1
	US-PATENT-CLASS-307-291		US-PATENT-APPL-SN-900659
	US-PATENT-CLASS-328-48		US-PATENT-CLASS-44-50
	US-PATENT-CLASS-328-71		US-PATENT-CLASS-44-62
	US-PATENT-CLASS-328-192		US-PATENT-CLASS-201-8
	US-PATENT-4,213,064		US-PATENT-CLASS-201-10
c71 N81-15767	NASA-CASE-NFS-25050-1		US-PATENT-CLASS-201-25
	US-PATENT-APPL-SN-057466		US-PATENT-4,246,001
	US-PATENT-CLASS-73-505	c27 N81-17262	NASA-CASE-ARC-11253-1
	US-PATENT-CLASS-308-10		US-PATENT-APPL-SN-028301
	US-PATENT-4,218,921		US-PATENT-CLASS-528-310
c74 N81-15818	NASA-CASE-MSC-18627-1		US-PATENT-CLASS-528-362
	US-PATENT-APPL-SN-186881		US-PATENT-CLASS-528-401
c16 N81-16110	NASA-CASE-MSC-18741-1		US-PATENT-CLASS-528-422
	US-PATENT-APPL-SN-217336		US-PATENT-4,245,085
c24 N81-16127	NASA-CASE-MSC-18223-1	c33 N81-17348	NASA-CASE-NFS-23845-1
	US-PATENT-APPL-SN-219681		US-PATENT-APPL-SN-938296
c25 N81-16174	NASA-CASE-NPO-15250-1		US-PATENT-CLASS-307-233E
	US-PATENT-APPL-SN-219639		US-PATENT-CLASS-307-306
c26 N81-16209	NASA-CASE-LEW-23169-2		US-PATENT-CLASS-333-204
	US-PATENT-APPL-SN-151746		US-PATENT-4,227,096
c27 N81-16238	NASA-CASE-NFS-25181-1	c33 N81-17349	NASA-CASE-MSC-16747-1
	US-PATENT-APPL-SN-218585		US-PATENT-APPL-SN-974475
c31 N81-16327	NASA-CASE-LEW-13120-1		US-PATENT-CLASS-328-37
	US-PATENT-APPL-SN-218587		US-PATENT-CLASS-328-55
c31 N81-16328	NASA-CASE-NPO-14845-1		US-PATENT-CLASS-328-134
	US-PATENT-APPL-SN-219680		US-PATENT-CLASS-331-4E
c31 N81-16329	NASA-CASE-LEW-12941-1		US-PATENT-4,241,308
	US-PATENT-APPL-SN-210632	c37 N81-17432	NASA-CASE-NPO-14388-1
c32 N81-16338	NASA-CASE-MSC-16170-2		US-PATENT-APPL-SN-008206
	US-PATENT-APPL-SN-147695		US-PATENT-CLASS-60-518
c33 N81-16384	NASA-CASE-LEW-13429-1		US-PATENT-CLASS-74-417
	US-PATENT-APPL-SN-220212		US-PATENT-4,240,256
c33 N81-16385	NASA-CASE-NFO-15269-1	c37 N81-17433	NASA-CASE-ARC-11251-1
	US-PATENT-APPL-SN-220214		US-PATENT-APPL-SN-057465
c33 N81-16386	NASA-CASE-NPO-15094-1		US-PATENT-CLASS-128-DIG.20
	US-PATENT-APPL-SN-225500		US-PATENT-CLASS-137-549
c35 N81-16427	NASA-CASE-NFS-25305-1		US-PATENT-CLASS-137-886
	US-PATENT-APPL-SN-214360		US-PATENT-CLASS-137-887
c37 N81-16468	NASA-CASE-MSC-16934-2		US-PATENT-CLASS-251-216
	US-PATENT-APPL-SN-185868		US-PATENT-CLASS-251-339
c37 N81-16469	NASA-CASE-GSC-12582-1		US-PATENT-4,239,057
	US-PATENT-APPL-SN-220213	c43 N81-17499	NASA-CASE-FRC-11013-1
c37 N81-16470	NASA-CASE-GSC-12619-1		US-PATENT-APPL-SN-043912
	US-PATENT-APPL-SN-225499		US-PATENT-CLASS-244-45
c44 N81-16528	NASA-CASE-LEW-13400-1		US-PATENT-CLASS-244-160
	US-PATENT-APPL-SN-219677		US-PATENT-4,240,601
c44 N81-16529	NASA-CASE-LEW-13401-1	c44 N81-17518	NASA-CASE-NPO-14619-1
	US-PATENT-APPL-SN-219678		US-PATENT-APPL-SN-027559
c44 N81-16530	NASA-CASE-HQN-10549-1		US-PATENT-CLASS-60-524
	US-PATENT-APPL-SN-151747		US-PATENT-CLASS-60-641
c47 N81-16677	NASA-CASE-NPO-15351-1		US-PATENT-CLASS-126-419
	US-PATENT-APPL-SN-224231		US-PATENT-4,236,383
c74 N81-16882	NASA-CASE-ABC-11311-1	c74 N81-17886	NASA-CASE-NPO-14219-1
	US-PATENT-APPL-SN-219640		US-PATENT-APPL-SN-888432
c06 N81-17057	NASA-CASE-FRC-11029-1		US-PATENT-CLASS-350-301
	US-PATENT-APPL-SN-164617		US-PATENT-CLASS-354-118
	US-PATENT-CLASS-73-147		US-PATENT-CLASS-362-11

	US-PATENT-CLASS-362-241	c33 N81-19392	NASA-CASE-GSC-12360-1
	US-PATENT-4,213,684		US-PATENT-APPL-SN-041164
c74 N81-17887	NASA-CASE-NPO-14657-1		US-PATENT-CLASS-363-21
	US-PATENT-APPL-SN-008211		US-PATENT-CLASS-363-101
	US-PATENT-CLASS-73-15R		US-PATENT-4,245,286
	US-PATENT-CLASS-356-432	c33 N81-19393	NASA-CASE-NPO-14505-1
	US-PATENT-4,243,327		US-PATENT-APPL-SN-956166
c74 N81-17888	NASA-CASE-NPO-14502-1		US-PATENT-CLASS-363-21
	US-PATENT-APPL-SN-965368		US-PATENT-CLASS-363-36
	US-PATENT-CLASS-356-345		US-PATENT-CLASS-363-40
	US-PATENT-CLASS-356-352		US-PATENT-CLASS-363-47
	US-PATENT-CLASS-356-358		US-PATENT-4,245,288
	US-PATENT-4,243,323	c33 N81-19394	NASA-CASE-MPS-23981-1
c02 N81-19016	NASA-CASE-LAR-12750-1		US-PATENT-APPL-SN-231543
	US-PATENT-APPL-SN-210491	c35 N81-19426	NASA-CASE-MPS-23923-1
c05 N81-19087	NASA-CASE-LAR-11797-1		US-PATENT-APPL-SN-053569
	US-PATENT-APPL-SN-969755		US-PATENT-CLASS-73-190B
	US-PATENT-CLASS-74-519		US-PATENT-4,248,083
	US-PATENT-CLASS-244-17.25	c35 N81-19427	NASA-CASE-MSC-16370-1
	US-PATENT-CLASS-416-114		US-PATENT-APPL-SN-061556
	US-PATENT-CLASS-416-500		US-PATENT-CLASS-329-50
	US-PATENT-4,245,956		US-PATENT-CLASS-329-107
c07 N81-19115	NASA-CASE-LEW-12907-2		US-PATENT-CLASS-375-1
	US-PATENT-APPL-SN-752050		US-PATENT-CLASS-375-34
	US-PATENT-APPL-SN-909235		US-PATENT-CLASS-375-99
	US-PATENT-CLASS-60-39.24		US-PATENT-CLASS-375-104
	US-PATENT-CLASS-364-106		US-PATENT-4,241,312
	US-PATENT-CLASS-364-431	c35 N81-19428	NASA-CASE-LAR-12706-1
	US-PATENT-4,249,238		US-PATENT-APPL-SN-210496
c07 N81-19116	NASA-CASE-LEW-12594-2	c35 N81-19429	NASA-CASE-LAR-12602-1
	US-PATENT-APPL-SN-741056		US-PATENT-APPL-SN-210506
	US-PATENT-APPL-SN-909608	c35 N81-19430	NASA-CASE-ARC-11317-1
	US-PATENT-CLASS-60-226R		US-PATENT-APPL-SN-229231
	US-PATENT-CLASS-60-236	c36 N81-19439	NASA-CASE-ARC-11312-1
	US-PATENT-CLASS-60-238		US-PATENT-APPL-SN-234244
	US-PATENT-CLASS-60-239	c36 N81-19440	NASA-CASE-MPS-25315-1
	US-PATENT-4,242,864		US-PATENT-APPL-SN-224232
c08 N81-19130	NASA-CASE-LAR-11970-2	c37 N81-19455	NASA-CASE-LEW-12982-1
	US-PATENT-APPL-SN-034104		US-PATENT-APPL-SN-929084
	US-PATENT-APPL-SN-727503		US-PATENT-CLASS-204-192E
	US-PATENT-CLASS-244-12.5		US-PATENT-CLASS-228-116
	US-PATENT-CLASS-244-52		US-PATENT-CLASS-228-205
	US-PATENT-CLASS-244-87		US-PATENT-4,245,768
	US-PATENT-4,236,684	c37 N81-19457	NASA-CASE-NPO-15205-1
c24 N81-19230	NASA-CASE-NPC-15057-1		US-PATENT-APPL-SN-233271
	US-PATENT-APPL-SN-235867	c44 N81-19558	NASA-CASE-NPO-14670-1
c25 N81-19242	NASA-CASE-MPS-25000-1		US-PATENT-APPL-SN-043941
	US-PATENT-APPL-SN-974474		US-PATENT-CLASS-136-258
	US-PATENT-CLASS-260-25.68B		US-PATENT-CLASS-252-62.3E
	US-PATENT-CLASS-526-88		US-PATENT-CLASS-357-30
	US-PATENT-CLASS-526-201		US-PATENT-CLASS-357-59
	US-PATENT-4,247,434		US-PATENT-CLASS-357-63
c25 N81-19244	NASA-CASE-NPO-13309-1		US-PATENT-4,249,957
	US-PATENT-APPL-SN-363130	c44 N81-19561	NASA-CASE-LEW-12443-1
	US-PATENT-CLASS-210-24		US-PATENT-APPL-SN-235797
	US-PATENT-CLASS-260-2.1E	c74 N81-19896	NASA-CASE-NPO-11337-1
	US-PATENT-CLASS-260-2.2B		NASA-CASE-NPO-11575-1
	US-PATENT-CLASS-264-41		US-PATENT-APPL-SN-090584
	US-PATENT-3,944,485		US-PATENT-APPL-SN-276599
c25 N81-19245	NASA-CASE-LEW-12590-1		US-PATENT-CLASS-340-146.3H
	US-PATENT-APPL-SN-229693		US-PATENT-CLASS-340-146.3S
c27 N81-19296	NASA-CASE-LEW-12933-1		US-PATENT-CLASS-340-146.3Y
	US-PATENT-APPL-SN-027557		US-PATENT-3,845,466
	US-PATENT-CLASS-260-33.4R	c74 N81-19898	NASA-CASE-NPO-12087-1
	US-PATENT-CLASS-427-221		US-PATENT-APPL-SN-095217
	US-PATENT-CLASS-427-379		US-PATENT-CLASS-250-83.6R
	US-PATENT-CLASS-528-353		US-PATENT-3,704,284
	US-PATENT-4,244,853	c74 N81-19899	NASA-CASE-NPO-15226-1
c31 N81-19343	NASA-CASE-GSC-12513-1		US-PATENT-APPL-SN-233274
	US-PATENT-APPL-SN-053571	c76 N81-19944	NASA-CASE-NPO-14831-1
	US-PATENT-CLASS-49-171		US-PATENT-APPL-SN-233269
	US-PATENT-CLASS-109-49.5	c33 N81-20352	NASA-CASE-NPO-13970-1
	US-PATENT-CLASS-109-58.5		US-PATENT-APPL-SN-023484
	US-PATENT-CLASS-220-82R		US-PATENT-CLASS-318-138
	US-PATENT-CLASS-22C-89A		US-PATENT-CLASS-318-254
	US-PATENT-4,254,566		US-PATENT-CLASS-318-439
c31 N81-19344	NASA-CASE-NPO-15251-1		US-PATENT-4,249,116
	NASA-CASE-NPO-15254-1	c52 N81-20703	NASA-CASE-NPO-14329-1
	US-PATENT-APPL-SN-229239		US-PATENT-APPL-SN-044432
c33 N81-19389	NASA-CASE-NPO-14297-1		US-PATENT-CLASS-73-141A
	US-PATENT-APPL-SN-938299		US-PATENT-CLASS-128-642
	US-PATENT-CLASS-156-DIG.96		US-PATENT-CLASS-128-774
	US-PATENT-CLASS-156-608		US-PATENT-4,249,417
	US-PATENT-CLASS-219-10.49R	c04 N81-21047	NASA-CASE-ARC-11257-1
	US-PATENT-CLASS-219-10.67		US-PATENT-APPL-SN-078611
	US-PATENT-CLASS-422-246		US-PATENT-CLASS-73-178R
	US-PATENT-CLASS-422-249		US-PATENT-CLASS-73-490
	US-PATENT-CLASS-432-264		US-PATENT-CLASS-73-504
	US-PATENT-4,242,553		US-PATENT-4,244,215

c04 N81-22036	NASA-CASE-NFO-15264-1	c36 N81-24425	NASA-CASE-NPO-15211-1
	US-PATENT-APPL-SN-241154		US-PATENT-APPL-SN-246779
c06 N81-22048	NASA-CASE-FRC-11043-1	c36 N81-24426	NASA-CASE-NPO-15201-1
	US-PATENT-APPL-SN-242790		US-PATENT-APPL-SN-246778
c27 N81-22190	NASA-CASE-LEW-13269-1	c37 N81-24442	NASA-CASE-LEW-12991-1
	US-PATENT-APPL-SN-242795		US-PATENT-APPL-SN-961832
c33 N81-22279	NASA-CASE-GSC-12517-1		US-PATENT-CLASS-277-96
	US-PATENT-APPL-SN-214361		US-PATENT-4, 260, 166
c33 N81-22280	NASA-CASE-NFS-24368-3	c37 N81-24443	NASA-CASE-LAR-11695-2
	US-PATENT-APPL-SN-243683		US-PATENT-APPL-SN-103836
c34 N81-22310	NASA-CASE-LEW-12253-1		US-PATENT-APPL-SN-893865
	US-PATENT-APPL-SN-243682		US-PATENT-CLASS-152-330RF
c36 N81-22344	NASA-CASE-GSC-12609-1		US-PATENT-CLASS-152-353G
	US-PATENT-APPL-SN-218586		US-PATENT-CLASS-152-353B
c37 N81-22358	NASA-CASE-GSC-12550-1		US-PATENT-CLASS-152-379.4
	US-PATENT-APPL-SN-238886		US-PATENT-CLASS-244-103B
c37 N81-22359	NASA-CASE-GSC-12622-1		US-PATENT-CLASS-244-130
	US-PATENT-APPL-SN-243684		US-PATENT-4, 267, 992
c37 N81-22360	NASA-CASE-LEW-12445-1	c37 N81-24445	NASA-CASE-MSC-18794-1
	US-PATENT-APPL-SN-238887		US-PATENT-APPL-SN-238785
c44 N81-22466	NASA-CASE-LEW-13171-1	c37 N81-24446	NASA-CASE-MSC-18791-1
	US-PATENT-APPL-SN-238790		US-PATENT-APPL-SN-248746
c74 N81-22894	NASA-CASE-NPO-15155-1	c37 N81-24447	NASA-CASE-GSC-12643-1
	US-PATENT-APPL-SN-242797		US-PATENT-APPL-SN-238786
c05 N81-24047	NASA-CASE-FRC-11065-1	c39 N81-24470	NASA-CASE-MSC-18723-1
	US-PATENT-APPL-SN-248744		US-PATENT-APPL-SN-234223
c08 N81-24106	NASA-CASE-LAE-12268-1	c44 N81-24519	NASA-CASE-LEW-12441-3
	US-PATENT-APPL-SN-015996		US-PATENT-APPL-SN-032307
	US-PATENT-CLASS-244-181		US-PATENT-APPL-SN-856462
	US-PATENT-CLASS-244-195		US-PATENT-CLASS-60-204
	US-PATENT-CLASS-318-584		US-PATENT-CLASS-60-267
	US-PATENT-CLASS-364-434		US-PATENT-CLASS-239-127.1
	US-PATENT-4, 261, 537		US-PATENT-4, 199, 937
c18 N81-24164	NASA-CASE-NFS-25403-1		US-PATENT-4, 245, 469
	US-PATENT-APPL-SN-248745	c44 N81-24520	NASA-CASE-MFS-23999-1
c26 N81-24230	NASA-CASE-LEW-13131-1		US-PATENT-APPL-SN-060435
	US-PATENT-APPL-SN-246772		US-PATENT-CLASS-250-203B
c27 N81-24256	NASA-CASE-ARC-11253-3		US-PATENT-CLASS-250-209
	US-PATENT-APPL-SN-028301		US-PATENT-4, 262, 195
	US-PATENT-APPL-SN-145283	c44 N81-24521	NASA-CASE-LEW-12918-1
	US-PATENT-CLASS-260-465.5B		US-PATENT-APPL-SN-134855
	US-PATENT-CLASS-528-310		US-PATENT-CLASS-429-94
	US-PATENT-CLASS-564-229		US-PATENT-CLASS-429-120
	US-PATENT-4, 269, 787		US-PATENT-CLASS-429-160
c27 N81-24257	NASA-CASE-LEW-13135-2		US-PATENT-CLASS-429-164
	US-PATENT-APPL-SN-113014		US-PATENT-4, 262, 064
	US-PATENT-APPL-SN-971475	c44 N81-24525	NASA-CASE-LAR-12588-1
	US-PATENT-CLASS-264-104		US-PATENT-APPL-SN-234222
	US-PATENT-CLASS-264-105	c52 N81-24711	NASA-CASE-MSC-16433-1
	US-PATENT-CLASS-429-27		US-PATENT-APPL-SN-910992
	US-PATENT-CLASS-429-28		US-PATENT-CLASS-4-144.3
	US-PATENT-CLASS-429-139		US-PATENT-CLASS-128-295
	US-PATENT-CLASS-429-249		US-PATENT-CLASS-128-761
	US-PATENT-CLASS-429-253		US-PATENT-4, 246, 901
	US-PATENT-CLASS-525-61	c52 N81-24716	NASA-CASE-MSC-18759-1
	US-PATENT-4, 262, 067		US-PATENT-APPL-SN-233270
c27 N81-24258	NASA-CASE-NPO-10424-1	c52 N81-24717	NASA-CASE-MSC-18761-1
	US-PATENT-APPL-SN-692636		US-PATENT-APPL-SN-254688
	US-PATENT-CLASS-260-37	c54 N81-24724	NASA-CASE-KSC-11085-1
	US-PATENT-3, 651, 008		US-PATENT-APPL-SN-046739
c27 N81-24265	NASA-CASE-LEW-13359-1		US-PATENT-CLASS-261-79A
	US-PATENT-APPL-SN-229233		US-PATENT-CLASS-422-3
c28 N81-24280	NASA-CASE-MSC-16394-1		US-PATENT-CLASS-422-27
	US-PATENT-APPL-SN-161255		US-PATENT-CLASS-422-30
	US-PATENT-CLASS-204-129		US-PATENT-CLASS-422-34
	US-PATENT-CLASS-204-252		US-PATENT-CLASS-422-109
	US-PATENT-CLASS-204-266		US-PATENT-4, 250, 143
	US-PATENT-CLASS-204-290F	c62 N81-24779	NASA-CASE-KSC-11048-1
	US-PATENT-CLASS-204-290B		US-PATENT-APPL-SN-023437
	US-PATENT-CLASS-204-291		US-PATENT-CLASS-364-200
	US-PATENT-4, 263, 112		US-PATENT-4, 254, 464
c33 N81-24338	NASA-CASE-NPO-14617-1	c74 N81-24900	NASA-CASE-GSC-12528-1
	US-PATENT-APPL-SN-051269		US-PATENT-APPL-SN-111439
	US-PATENT-CLASS-330-8		US-PATENT-CLASS-250-368
	US-PATENT-4, 262, 259		US-PATENT-CLASS-250-483
c33 N81-24348	NASA-CASE-LEW-13570-1		US-PATENT-4, 262, 206
	US-PATENT-APPL-SN-251009	c74 N81-24907	NASA-CASE-MSC-18674-1
c34 N81-24384	NASA-CASE-NFC-15400-1		US-PATENT-APPL-SN-235363
	US-PATENT-APPL-SN-246774	c25 N81-25159	NASA-CASE-NPO-15102-1
c35 N81-24413	NASA-CASE-NFS-25242-1		US-PATENT-APPL-SN-154726
	US-PATENT-APPL-SN-246773		US-PATENT-CLASS-250-350
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	US-PATENT-APPL-SN-282191		US-PATENT-CLASS-92-130B
c37 N81-31551	NASA-CASE-LAR-12744-1		US-PATENT-CLASS-318-663
	US-PATENT-APPL-SN-270762		US-PATENT-4,274,038
c54 N81-31848	NASA-CASE-LAR-12882-1	c52 N81-33804	NASA-CASE-ARC-11264-1
	US-PATENT-APPL-SN-267179		US-PATENT-APPL-SN-235866

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